



COUNTY BOROUGH OF NORTHAMPTON.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1936.

By **STEPHEN ROWLAND**, M.D.Edin., D.P.H.Camb.,
Medical Officer of Health,
School Medical Officer, and
Chief Tuberculosis Officer.



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TABLE OF CONTENTS.

	PAGE
Introductory Letter	6
Public Health Staff	8
Summary of Statistics	9
I.—STATISTICS AND SOCIAL CONDITIONS :—	
Population	10
Births	10
Stillbirths	10
Deaths	10
Social Conditions	11
Unemployment	11
Meteorology	13
Other Statistics	13
II.—GENERAL PROVISION OF HEALTH SERVICES :—	
Public Health Officers	13
Laboratory Facilities	14
Ambulance Facilities	14
Nursing in the Home	14
Treatment Centres and Clinics	14
Municipal Hospitals	15
Voluntary Hospitals, etc.	15
Poor Law Medical Out-relief	16
Care of Mental Defectives	16
Maternity and Child Welfare	18
Maternity and Other Nursing Homes	18
Legislation in Force	19
Blind Persons	20
School Medical Service	21
III.—SANITARY CIRCUMSTANCES :—	
Water	21
Polluted Well	22
Drainage and Sewerage	22
Rivers and Streams	22
Closet Accommodation	23
Public Cleansing	23
Sanitary Inspection	23
Shops Act, 1934	23

	PAGE
Smoke Abatement	23
Swimming Baths and Pools	24
Eradication of Bed Bugs	24
Schools	25
Canal Boats	25
Common Lodging Houses	26
Factories and Workshops	26
Offensive Trades	26
Tents, Vans, Sheds, etc.	26
Premises controlled by Bye-laws, etc.	27
Rag Flock Acts, 1911 and 1928	27
Rat Repression	27

IV.—HOUSING :—

Council Houses	28
Other New Buildings	28
Housing Acts	28
Slum Clearance	29
Public Health Acts	31
Prosecutions	31
Overcrowding	31
Sufficiency of Supply of Houses	33
Housing Statistics	33
Other Housing Matters	35

V.—INSPECTION AND SUPERVISION OF FOOD :—

Milk Supply	35
Milk in Schools	36
Tuberculosis Order, 1925	36
Dairies, Cowsheds, and Milkshops	36
Milk (Special Designations) Orders, 1923 and 1936	37
Meat and Other Foods	37
Disease in Meat	38
Section 117 of the Public Health Act, 1875	38
Slaughterhouses	38
Slaughter of Animals Act, 1933	39
Public Health (Meat) Regulations, 1924	40
Grading and Marking of Foodstuffs	40
Bakehouses	40
Other Premises dealing with Food	40
Food Poisoning	40
Food and Drugs (Adulteration) Act, 1928	40
Preservatives, etc.	41
Chemical Work	41
Bacteriological Work	41
Nutrition	41
Shell-fish (Molluscan)	41

VI.—PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES :—

“ Zymotic Deaths ”	42
Measles and Whooping Cough	42
Diarrhœa and Enteritis (<i>see also</i> Appendix II.)	43
Influenza	43
Enterica	43
Erysipelas	43
Chickenpox	44
Vaccination	44
Smallpox	44
Scarlet Fever	44
Sixty Years of Scarlet Fever in Northampton	45
Diphtheria	45
Pneumonia	46
Borough Hospitals	46
Puerperal Fever (<i>see also</i> Appendix II.)	47
Puerperal Pyrexia (<i>see also</i> Appendix II.)	47
Ophthalmia Neonatorum (<i>see also</i> Appendix II.)	47
Pemphigus Neonatorum	47
Venereal Diseases	48
Cancer	48
Prevention of Blindness	50
Tuberculosis (<i>see also</i> Appendix I.)	50
Leptospirosis (Weil's Disease)	51
Bacteriology	51
Disinfection, etc.	51

VII.—MATERNITY AND CHILD WELFARE (*see also* Appendix II.) :—

General Remarks	52
Infant Mortality	52
Maternal Mortality	52
Toddlers	52
Midwifery and Maternity Services	53
Institutional Provision for Mothers and Children	53
Health Visitors	53
Infant Life Protection	53
Orthopædic Treatment	53
Otorrhœa	54
Milk for Mothers and Children	54
Voluntary Workers	54

APPENDICES.

I.—REPORT OF CLINICAL TUBERCULOSIS OFFICER :—

Notifications	55
Deaths	55
Revision of Register	55
X-ray Examinations	56
Artificial Pneumothorax	56
Dental Treatment	56

	PAGE
Extra Nourishment	57
Park Workers	57
Housing	57
Care Work	57
Early Diagnosis	58
Young Adult Mortality	58
The Problem of Prevention	59
A Proposition	60
Tuberculosis Dispensary	61
Welford Road Hospital	62
Creaton Sanatorium	64
Manfield Orthopædic Hospital	64
Other Institutions	65
Public Health Act, 1925	65
Public Health (Prevention of Tuberculosis) Regulations, 1925..	65
Statistical Tables	66

II.—REPORT OF ASSISTANT MEDICAL OFFICER FOR MATERNITY AND CHILD WELFARE :—

Infant Mortality	72
Notification of Births	72
Stillbirths	73
Home Visitation	73
Ultra-violet Ray Treatment	73
Manfield Orthopædic Hospital	74
New Centre	74
Statistics	74
Voluntary Work	75
Toddlers' Clinic	76
Midwives	76
Maternity Homes	76
Ante-natal Work	76
Doctors' Bills	78
Dental Treatment	78
Milk	78
Puerperal Fever and Pyrexia	78
Maternal Deaths	79
Ophthalmia Neonatorum	79
Diarrhœa and Enteritis	79
Infant Life Protection	79
Statistical Tables	80

III.—STATISTICAL TABLES :—

General Tables	83
Vital Statistics 1906-1936 (Table A)	99
Cases of Notifiable Diseases	(Table B)
Causes of Death	(Table C)
Infant Mortality	(Table D)
Factories, Workshops, etc.	(Table E)

*To the Mayor, Aldermen, and Councillors of the County Borough of
Northampton.*

MR. MAYOR, LADIES, AND GENTLEMEN,

I have the honour to present the Annual Report of the Medical Officer of Health for the year 1936, which for statistical purposes embraces a period of fifty-three weeks ended 2nd January, 1937.

The report is on the lines of its predecessors and is not a "survey report."

Four new tables, which I hope will be of interest, have been included, viz:—Table 13 (page 92) relating to scarlet fever in Northampton over a period of sixty years, and Tables 17, 18, and 19 giving cancer statistics. A few remarks on these subjects appear on pages 45 and 48.

The birth-rate of 12·5 per thousand living was the highest since 1932. (See page 10).

The death-rate (12·6) was the highest since 1919 and was 0·5 above the rate for England and Wales. In spite of this, the adjusted death-rate of 12·1 is still one of the lowest amongst those for the large towns of the Midlands, ranking sixth out of fifteen. A few notes on this subject appear on page 10.

The infantile death-rate (usually a low one in the Borough) touched a new record by falling to the remarkable figure of 39·9, easily the lowest on record. (See pages 52 and 72).

The "zymotic death-rate" of 0·06 was also the lowest ever recorded in Northampton. (See page 42).

The tuberculosis death-rate continues to fall slowly year by year, the total rate of 0·64 (pulmonary 0·56 and 0·08 for all other forms) is the lowest so far recorded. (See pages 50 and 55).

We have again to record a very low incidence of infectious disease in the Borough.

The work of slum clearance has proceeded without any interruption, nearly one thousand houses having been dealt with during the last six years. (See pages 29 to 31).

Notes on the Housing Act, 1935, giving the salient features disclosed by the overcrowding survey, appear on pages 31 to 33.

The Council's public water supply continues to be above suspicion. (See page 21).

Though the death-rate from all causes is higher than usual, largely through circumstances explained on page 10, I think one may assume, considering the remarkably low rates for infant mortality and the "zymotic diseases" and the continued fall in tuberculosis, that the sanitary conditions in Northampton are satisfactory.

There were four outstanding events in connection with health measures in Northampton during the year, viz :—the opening of the Barratt Maternity Home, the new Maternity and Infant Welfare Centre in St. Giles' Street, the Nursery School in Silver Street, and the new Out-patient Clinic in Hazelwood Road in connection with Manfield Hospital. These matters are dealt with in the appropriate sections of the report.

I again wish to acknowledge the loyal assistance and support I have received from all members of my Staff during the year under review, a support without which the smooth working and efficiency of the Department would be impossible.

I remain, Mr. Mayor, Ladies, and Gentlemen,

Your obedient Servant,

Stephen Rowland

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
GUILDHALL, NORTHAMPTON.
MAY, 1937.

PUBLIC HEALTH STAFF.

<i>Medical Officer of Health, School Medical Officer, and Chief Tuberculosis Officer</i>	..	..	..	STEPHEN ROWLAND, M.D. Edin., D.P.H. Camb.
<i>Tuberculosis Officer</i>	..	..	..	NORMAN B. LAUGHTON, M.B., Ch.B., D.P.H.
<i>Assistant Medical Officer for Maternity and Child Welfare</i>				MISS EVELYN F. BEBBINGTON, M.B., Ch.B., D.P.H., M.R.C.S., L.R.C.P.
<i>Sanitary Inspectors</i>	..	..	..	W. J. BARKER*† (<i>Chief Inspector and Rat Officer</i>) J. WALKER*† (<i>also Inspector of Common Lodging Houses</i>) J. BROWN*† (<i>Meat and Food Inspector</i>) B. KNOWLES*†
<i>Assistant Sanitary Inspectors</i>	..	..	..	T. L. BOAST*† S. A. TENCH* W. L. MONKS*† (<i>also Inspector of Canal Boats</i>) R. SPENCER*†
<i>Health Visitors</i>	..	..	..	MISS L. M. ISLIP‡|| MISS M. E. MOSSEY‡||§ MRS. F. H. SMITH‡||§ MISS F. M. V. BLYTHE BROWN‡|| MISS E. C. AGAR‡||¶
<i>Tuberculosis Nurse</i>	..	..	..	MISS L. REESE ||
<i>Matrons</i>	..	..	..	MISS M. E. NORMAN ||§ (<i>Harborough Road Infectious Diseases Hospital</i>) MISS K. B. STONE ||§ (<i>Welford Road Tuberculosis Hospital</i>)
<i>Clerks</i>	..	..	..	A. F. KNIGHT (<i>Chief Clerk</i>) S. J. KNIGHT (<i>Tuberculosis Dispensary</i>) H. T. BOSWELL MISS D. E. ADNITT (<i>Infant Welfare Centre</i>) S. E. MOORE F. A. GRAVES
<i>Removal and Disinfecting Staff</i>	..	..	..	C. H. WILLIAMS A. W. BLASON R. G. A. BRITTEN
<i>Rat-catcher</i>	..	..	..	A. PATCHING

All the above are whole-time Officers. School Medical Staff is not included.

*Holds Inspector's Certificate of the Royal Sanitary Institute.

†Holds Certificate for Inspecting Meat and Other Foods.

‡Holds Certificate of the Central Midwives Board.

||General Trained Nurse.

§Fever Trained Nurse.

¶Holds Health Visitor's Certificate.

SUMMARY OF STATISTICS.

Latitude.....	52° 14' North.	Longitude.....	0° 54' West.
Height of Guildhall above general mean sea level (in feet)	252		
Area of Borough (in acres) as extended, 1st April, 1932	6,201		
Population :—			
Census 1931 (before extension)	92,341		
Census 1931 (including area added 1st April, 1932)	96,546		
Registrar-General's Estimate at Mid-year 1936	96,300		
Number of Inhabited Houses :—			
Census 1931	23,141		
According to Rate Books (31st December, 1936)	27,800		
Number of Families or Separate Occupiers (Census 1931) ...	24,966		
Rateable Value (31st December, 1936)	£729,567		
Yield of One Penny Rate (31st December, 1936)	£2,817		

EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1936.

	TOTAL.	M.	F.		
Live Births {	Legitimate .....1,158	572	586	} Birth-rate	12·5
	Illegitimate 46	20	26		
	Total .....1,204	592	612		
Stillbirths {	Legitimate 41	20	21	} Rate	0·48*
	Illegitimate 5	2	3		
	Total 46	22	24		
Deaths	1,209	590	619	—Death-rate	12·6
Adjusted Death-rate (Areal Comparability Factor 0·96)					12·1
Percentage of Total Deaths occurring in Public Institutions ..					46·3
Number of Women dying in, or in consequence of, Childbirth	(From Sepsis 3) (From Other Causes 1)				4†
Deaths of Infants under One Year of Age per 1,000 Live Births :—					
Legitimate..38·0	Illegitimate..87·0	Total	39·9		
			NUMBER.	RATE.	
“ Zymotic Deaths ”			6	0·06	
Deaths from Measles			1	0·01	
Deaths from Whooping Cough			2	0·02	
Deaths from Diarrhoea (under two years of age)			2	‡	
Deaths from Respiratory Tuberculosis			54	0·56	
Deaths from Other Tuberculous Diseases			8	0·08	
Total Tuberculosis Deaths			62	0·64	
Deaths from Cancer			168	1·74	
Deaths from Influenza			19	0·20	

*36·8 per 1,000 Total (Live and Still) Births Registered.

†3·20 per 1,000 Total Births (Sepsis 2·40 ; Other Puerperal Causes 0·80).

‡1·7 per 1,000 Live Births Registered.

I.—STATISTICS AND SOCIAL CONDITIONS.

Population

The Registrar-General estimated the resident population of the County Borough of Northampton at mid-year 1936 to be 96,300, a decrease of four hundred on his estimate for the previous year. It may not be out of place to remind readers that the Registrar-General's figure for the mid-year population is only an estimate. We shall not be able to get the exact figure until the next census, which is due in 1941.

The natural decrease of the population, *i.e.*, the excess of deaths over live births, for 1936 was five, or 0·05 per thousand living, a low figure but one which shews the present trend of the population. Table 1 (page 83) gives the estimated population and the natural increase or decrease during each of the last ten years.

Births

1,204 live births (592 males, 612 females) were registered, giving a birth-rate of 12·5 per thousand of the estimated resident population, compared with 14·8 for England and Wales and 14·9 for the 122 county boroughs and great towns (including London). The local birth-rate shewed an increase of 0·6 per thousand and was the highest since 1932. Table 2 (page 83) gives the rates for the last ten years, compared with those for the country.

Forty-six (3·8 per cent.) of the births were illegitimate.

Stillbirths

There were forty-six stillbirths registered, giving a rate of 0·48 per thousand, as compared with 0·61 for England and Wales. The rate expressed per thousand total births (including stillbirths) registered was 36·8.

For further notes on stillbirths, *see* page 73.

Deaths

1,209 deaths (590 males, 619 females) were registered, equal to a death-rate of 12·6, being the highest rate since 1919 (which was largely influenced by the pandemic of influenza), compared with 12·1 for England and Wales and 12·3 for the great towns. Table 3 (page 83) gives the local and national death-rates for the last ten years.

This is only the fourth occasion during the last twenty-five years on which the Borough rate has exceeded that for England and Wales.

In considering the reasons for the rise in the death-rate which occurred in Northampton during 1936 one has to take into account the following points:—

In the first place, the deaths upon which our rate was calculated were those registered during fifty-three weeks which comprised our statistical year, as against fifty-two weeks in the statistical year 1935, when the death-rate was 10·9. Secondly, deaths assigned to heart diseases exceeded those from the same cause registered during 1935 by 122. The only other

cause of death shewing any notable increase was senility where there was an excess of ten (from thirty-nine to forty-nine), a circumstance one might expect with the prolongation of life which has been in progress for some years. Thirdly, we could not expect to continue with a rate of 10·9, which was the second lowest on record for Northampton. Fourthly, the Registrar-General has reduced the estimated number of the population of the Borough by four hundred, which in itself raises the death-rate. What reason the Registrar has for reducing his estimated population is quite unknown to me.

58·6 per cent. of the deaths related to elderly persons (sixty-five years and upwards).

671 persons, including residents and non-residents, died in local institutions, equivalent to 46·3 per cent. of the total deaths. The deaths of non-residents were transferred by the Registrar-General to their respective areas, whilst the deaths of Northampton residents which took place outside the Borough were credited to us as "inward transfers."

Ninety-four deaths occurred for which no medical certificates of the causes of death were furnished. These included sixty-three inquests, twenty-eight coroner's certificates after post-mortem examinations without inquests, and three uncertified, or 7·8 per cent. of the nett deaths registered.

The adjusted death-rate for Northampton (calculated by multiplying the crude rate by the Registrar-General's areal comparability factor of 0·96) was 12·1. This factor has been based on the sex and age constitution of the local population at the 1931 Census ; its object is to modify the crude death-rate so as to make it comparable with the crude rate for the country as a whole or with the similarly adjusted death-rate for any other area.

Table C at the end of this report, giving the causes of death in different age-periods, was prepared in the Public Health Department from information supplied weekly by the local registrars. The classification agrees closely with the figures received from the Registrar-General on 7th May, 1937.

There was no important change in the social conditions in the Borough during the year. The staple trade, upon which the town so largely depends, continued to be well employed, and the building trade, which has been experiencing something in the nature of a boom during the past few years, continued to provide work for a large number of men. There was practically no unemployment amongst women and juveniles (both male and female).

Social
Conditions

The Manager of the Employment Exchange has again kindly furnished information regarding unemployment in Northampton, from which the following particulars have been extracted :—

Unemploy-
ment

Total Live Register in January, 1936 (including 1,291 temporarily stopped persons and 511 non-claimants)	4,431
Total Live Register in July, 1936 (including 1,238 temporarily stopped persons and 375 non-claimants)	3,472
Total Live Register in December, 1936 (including 1,770 temporarily stopped persons and 346 non-claimants)	4,274

These figures shew a general all-round decrease on those for the corresponding periods in 1935. The figure for December is somewhat high owing to the increase of temporarily stopped workers as a result of extended Christmas holidays.

Generally, conditions remain satisfactory in all the chief sources of employment in the Borough.

During the week ended 26th December, 180 men, on whom depended 90 women and 76 children, received unemployment relief from the Public Assistance Committee. Again I am pleased to say these figures shew a considerable fall when compared with those for the corresponding date in 1935.

The Borough Engineer has supplied the following information relating to the principal public works upon which unemployed labour was engaged :—

CONTRACT WORKS :—

Far Cotton Main Drainage Extension ;
Kingsthorpe Main Drainage Extension.

DEPARTMENTAL WORKS—DIRECT LABOUR :—

Abington Housing Estate—Sewer and Road Works ;
St. David's Housing Estate—Sewer and Road Works ;
Spencer Bridge Road Housing Estate—Sewer and
and Road Works ;
Swan Street—Sewer Reconstruction ;
Welford Road—New Surface Water Sewer ;
London Road—Main Drainage ;
Upper Mounts—Street Widening ;
Duston Road—Street Widening ;
Weedon Road—Street Widening ;
St. Andrew's Road—Street Widening ;
Queen Eleanor Road—Street Widening ;
Gas Street—Street Improvement ;
Bridge Street—Construction of Car Park ;
Surface Dressing of Roads.

The above works were not executed essentially for the relief of unemployment, but in accordance with the policy of the Council any labour required extra to the regular staff of the Borough Engineer's Department was engaged for periods not exceeding eight weeks through Employment Exchange channels ; 498 men were so employed.

Again I have to thank Mr. R. H. Primavesi for kindly supplying the data (*see* Table 4, page 84) from which these notes were compiled. Meteorology

The year 1936 (at least so far as the midland area is concerned) was marked by two outstanding features, viz :—a dearth of sunshine and an abnormally high rainfall. The total rainfall for the year was 30·78 inches, or 6·41 inches above the average for the last thirty-two years. As this is the second year in succession with a total well above the average, it appears as though the sequence of dry years may be ended for a time. The wettest month was July with 4·99 inches, followed by January with 4·42. The driest month was August, when only 0·38 inch was registered. The heaviest fall in twenty-four hours was 1·18 inches on 9th July and also on 14th December. At least 0·01 inch of rain fell on as many as 208 days, which is the highest number since our records began in 1904.

The total amount of bright sunshine recorded was 1,126 hours, which is below the mean for this part of England and well below the amounts of the last three years.

The highest shade temperature was 85°F. on 20th and 21st June and the lowest (22°F.) occurred on 19th January. There were fifty-three cold nights, *i.e.*, nights on which the temperature fell to 32°F. (freezing point) or below.

The prevailing direction of the wind in the Borough was south-west on 123 days, south-east on 63, north-east on 85, and north-west on 89; in addition there were six “calm” days, viz :—two each in January, September, and November.

The notes on infant and maternal mortality, infectious diseases, housing conditions, and other statistics usually included in the annual report, will be found under the headings referring to these matters. Other Statistics

Attention is also directed to the statistics on page 9 and to Tables A, B, C, and D at the end of this report.

II.—GENERAL PROVISION OF HEALTH SERVICES.

A list of the whole-time officers of the Public Health Department on 31st December, 1936, appears on page 8. Public Health Officers

The part-time officers connected with the Department comprise two medical officers, a male orderly, and a nurse at the Venereal Diseases Clinic held at Northampton General Hospital; a non-resident medical officer and his deputy at St. Edmund's Hospital, Wellingborough Road, which is a mixed institution under the management of the Public Assistance Committee; a medical officer and a nurse in connection with maternity and child welfare work; three public vaccinators, who also act for poor law medical out-relief; a consultant obstetrician; a public analyst; two vaccination officers; and a veterinary surgeon.

The staff employed in the school medical service is mentioned in the paragraph dealing with this subject on page 21.

Laboratory
Facilities

No change was made during the year in these facilities, *i.e.*, for the examination of clinical material (sputum, swabs, etc.), water, milk, and foodstuffs. (*See* page 12 of 1930 report).

Ambulance
Facilities

The Borough is well supplied with ambulance facilities.

INFECTIOUS CASES. The Public Health Committee owns three motor vehicles which are adaptable for ambulances.

NON-INFECTIOUS AND ACCIDENT CASES. These are provided for by the Northampton Branch of the St. John Ambulance Association, with headquarters in King Street.

MATERNITY CASES. These are usually removed by the Ambulance Association.

Nursing in
the Home

There was no extension or alteration in the provision for home nursing outlined in my report for 1930. The Queen's Institute of District Nursing continued to give a very efficient service.

Treatment
Centres and
Clinics

The Maternity and Child Welfare Centres, School Clinic, Tuberculosis Dispensary, and Venereal Diseases Clinic were fully described in my report for 1930, pages 19 and 20. The scope and purpose of the Mental Diseases Clinic held at the General Hospital was outlined in my report for 1932, page 13.

The new maternity and child welfare centre, erected in St. Giles' Street at an inclusive cost of about £4,000, was opened by Mrs. John Woods, chairman of the Northampton Maternity and Infant Welfare Voluntary Association, on 29th October, 1936. The building, the designs for which were prepared in the offices of the Borough Engineer (R. A. Winfield, Esq., A.M.Inst. C.E.), contains a large hall which can be used for meetings, etc., and which has the windows fitted with light-proof blinds to allow of cinematograph exhibitions, toddlers' play room, doctor's consulting room, weighing room, kitchen, office, and necessary lavatories, sluices, etc. The heating, lighting, and decoration are on modern lines and the whole building is admirably adapted to its requirements, a great contrast to the old centre in Dychurch Lane, which has done service for so many years. It is not too much to say that the new centre is one of the best and most up-to-date in the Midlands.

A new out-patient department in connection with Manfield Orthopædic Hospital was opened by Miss E. Phipps Robinson, M.B.E., honorary secretary of the Crippled Children's Fund, on 8th July, 1936. The new premises are situated in Hazelwood Road and replace the clinic which had been conducted for some years at the ambulance headquarters, King Street, and which had been found to be too small and inconvenient to enable the staff to cope with the ever increasing

amount of work. As pointed out at the opening ceremony, the treatment of most orthopædic cases is one of long duration, often extending for years after discharge from hospital, during which time the patient requires to be kept under observation and possibly some form of treatment, massage, adjustment of splints, etc. In this up-to-date institution are provided a spacious waiting room, dressing cubicles, examination room, X-ray and plaster rooms, staff rooms, etc. The number of patients now receiving supervision and treatment amounts to nearly three thousand.

Full reports on the four municipal hospitals were given in my reports for 1930 and 1931 :— Municipal Hospitals

HARBOROUGH ROAD INFECTIOUS DISEASES HOSPITAL. Nothing in the nature of additions or alterations to this hospital took place during the year. Some external and internal painting was done, also the old hot water service pipes in Ward II. were replaced with copper tubing. (*See also* page 46).

WELFORD ROAD TUBERCULOSIS HOSPITAL. No internal or external alterations or additions were undertaken at this hospital. The necessary painting, etc., to maintain the fabric in a sound condition was carried out. (*See also* pages 46 and 62).

SMALLPOX HOSPITAL. At this hospital nothing in the way of repairs was needed beyond a little external painting, which was carried out under the supervision of the Borough Engineer's Department. (*See also* page 46).

ST. EDMUND'S HOSPITAL, WELLINGBOROUGH ROAD. The reconditioning and redecorating of the wards in the male infirmary proceeded up to a point where the work was held up for various reasons and was still suspended at the end of the year. (*See also* page 46).

A description of Northampton General Hospital, Creaton Sanatorium, Manfield Orthopædic Hospital, and Berry Wood Mental Hospital appeared in my report for 1930, pages 16 and 17. Further reference is made to Manfield Hospital on pages 64 and 74 of this report and to Creaton Sanatorium on page 64.

Voluntary Hospitals, etc.

The Barratt Maternity Home in the grounds of Northampton General Hospital, the gift of William Barratt, Esq., and Mrs. Barratt, was opened on 4th July by H.R.H. Princess Alice, Countess of Athlone, in the presence of Earl and Countess Spencer and a distinguished company. In the words of Earl Spencer—"Mr. and Mrs. Barratt have spared nothing in making it not only most charming and up-to-date, but also most adequately equipped. They have even thought of the fathers, who have usually been ignored on such occasions. The wards range from single bed to five bed, so that whatever her circumstances are every mother can be provided for. There

are also the necessary adjuncts, such as nurseries and a separate isolation section."

Splendid as is this gift, it is only half the story. Since the Home was opened there has been such a demand for admission that the beds have been fully occupied and so many cases requiring gynæcological treatment have presented themselves that Mr. and Mrs. Barratt have come forward with an offer to add to the Maternity Home a fully equipped gynæcological department, including an operating theatre, at a cost estimated to be equal to the original gift of a year ago, a truly munificent offer. When this is erected, Northampton will be provided with departments for all the specialised branches of medicine and we shall have a maternity and gynæcological department equal to any in the land.

Poor Law
Medical
Out-relief

No changes were made during the year in the provision of poor law medical out-relief. The medical officers serving the three areas into which the Borough is divided for this purpose are :—

No. 1 District (comprising Kingsley, St. Edmund's, St. George's, St. Michael's, South, and Weston wards)
—Dr. E. Robertson, 220, Kettering Road ;

No. 2 District (Castle, Kingsthorpe, St. Crispin's, St. James', and Spencer wards)—Dr. J. Cullen, 5, St. Matthew's Parade ; and

No. 3 District (Delapre ward)—Dr. H. F. Percival, 2, Spencer Parade.

The service is working satisfactorily.

Care of
Mental
Defectives

For some time it had been felt that the work of visiting mental defectives, advising parents and friends, etc., had grown beyond the scope of a part-time official and I am pleased to say that a whole-time paid organiser for supervising and co-ordinating the activities of the various bodies engaged in this work was appointed, and commenced duty on 1st September, 1936.

Another move in the right direction also took place during the year, viz :—the transfer of the Handicraft Centre from the old building in St. Michael's Road to the new centre in Kettering Gardens. The Northampton Town Council purchased premises in Kettering Gardens which, after slight alterations, were approved by the Board of Control and the Ministry of Health as a handicraft centre. The new premises were opened by Miss Evelyn Fox, honorary secretary of the Central Association for Mental Welfare, on 16th November, 1936, and are under the management of the Northampton Handicraft Centre Voluntary Committee. The staff consists of an honorary supervisor and a salaried assistant, together with a panel of voluntary workers. I would like to pay a tribute to the good work done by these

ladies and gentlemen, led by Mrs. Cotton, who give up much time and thought to the welfare of those mentally afflicted. The premises comprise a large hall which can be divided by movable screens, thus providing separate rooms for the boys and girls, while by removing the screens the room can be used as a whole for special purposes. There is an adequate system of lighting, heating, and ventilation. Attached to the hall is a small scullery and cloakrooms for boys and girls. The maximum number of places provided is forty. Sessions are held from 2 to 4.30 p.m. on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays. Occupation and training consist of special exercises (including balance, hand exercises, etc.), speech training, country dancing, and the following handicrafts:—embroidery, leather work, cane work, weaving, rug-making, coir mat-making, and fretwork.

A voluntary occupation centre, under the Northampton Voluntary Association for the Care and Training of Mentally Defective Children, is carried on for suitable low grade feeble-minded children in a large hall which is part of the School Clinic buildings in King Street. A supervisor and an assistant are responsible for the training of the children and voluntary helpers attend regularly. There is an average attendance of just over twenty. The hours are from 1.45 to 4.15 p.m. and a simple handwork scheme (knitting, rug-making, leather work, stencilling, clay modelling, etc.) is varied by singing and simple physical exercises, training in cleanly behaviour, and simple household duties. A tea interval is also part of the training. The Local Authority makes an annual grant of £185 towards the expenses.

It may not be out of place here to mention in connection with Bromham House Colony how this institution came into being. An Order made by the Minister of Health on 13th June, 1930, constituted a Joint Board consisting of representatives of the County Councils of Bedford and Northampton and of the County Borough of Northampton for the joint exercise and performance of certain of their powers as local authorities under the Mental Deficiency Acts, 1913 to 1927, for providing suitable and sufficient accommodation for defectives at Bromham House, near Bedford. The purchase of Bromham House was completed on 10th July, 1930. The existing premises were certified by the Board of Control for the reception of twelve high grade employable males of the age of sixteen years and upwards on 17th February, 1931, subject to certain slight alterations and adaptations being made. Plans and estimates for erecting and furnishing a colony, to accommodate in the first instance 260 patients, have been approved by the constituent authorities, the Board of Control, and the Ministry of Health. The accepted tenders, including furniture, fees, etc., amount to £95,000. The buildings are in course of erection and are expected to be completed by the autumn of 1937. The accom-

modation includes five patients' houses, training centre, laundry, boiler-house, four cottages for staff, electric light sub-station, conversion of existing buildings into workshops ; together with the construction of necessary roads and paths, sanitary and water services, fittings, etc.

St. Edmund's Hospital, which is administered by the Public Assistance Committee as a "mixed institution," is certified under Section 37 of the Mental Deficiency Act, 1913, for the temporary reception of nine medium to low grade mental defectives, of either sex, over the age of sixteen years.

Maternity
and Child
Welfare

The information required by the Ministry of Health on the services provided under the following heads will be found in Section VII. of this report, dealing with Maternity and Child Welfare, on page 53 :—

- (a) Midwifery and Maternity Services ;
- (b) Institutional Provision for Mothers and Children ;
- (c) Health Visitors ;
- (d) Infant Life Protection ;
- (e) Orthopædic Treatment.

Maternity
and Other
Nursing
Homes

At the end of December, 1936, eight nursing homes were on the register, viz :—

Maternity Homes	2
Mixed Home	1
Homes for Medical and Surgical Cases, etc.	4
Home for Mothers and Babies	1

The last-mentioned institution is St. Saviour's Home, Kingsthorpe, managed by a committee of the Peterborough Diocesan Authorities, and was fully described in my report for 1930. The home is for unmarried mothers, who are retained in the institution for from three to six months after confinement.

One nursing home—the Nightingale Nursing Home, 44, East Park Parade—registered as a maternity home on 1st April, 1935, was removed from the register in October, 1936, the tenant having vacated the premises.

All these institutions were inspected at regular intervals by the Assistant Medical Officer for Maternity and Child Welfare, the officer appointed by the Local Supervising Authority to carry out this duty. (See page 76).

Five institutions are exempted from registration under Section 6 of the Nursing Homes Registration Act, 1927, viz :—Northampton General Hospital (including Barratt Maternity Home), Margaret Spencer Convalescent Home, Manfield Orthopædic Hospital, John Greenwood Shipman Convalescent Home, and the Bethany Homestead Nursing Home.

A list of the General Adoptive Acts and Bye-laws relating to public health in force in the County Borough of Northampton was given on pages 17 and 18 of last year's report ; as there are no alterations it is not reproduced here. An up-to-date list of the Local Acts and Orders is given below :—

Legislation
in Force

- Northampton Improvement Act, 1843.
- Northampton Waterworks Act, 1861.
- Northampton Corporation Markets and Fairs Act, 1870.
- Northampton Improvement Act, 1871.
- The Local Government Board's Provisional Orders Confirmation (Arundel, etc.) Act, 1876.
- Northampton Waterworks Act, 1882.
- Northampton Corporation Act, 1882.
- Northampton Corporation Waterworks Act, 1884.
- Local Government Board's Provisional Orders Confirmation (No. 4) Act, 1892.
- Local Government Board's Provisional Orders Confirmation (No. 14) Act, 1900.
- Local Government Board's Provisional Orders Confirmation (No. 10) Act, 1907.
- Northampton Corporation Act, 1911.
- Northampton Corporation Water Act, 1913.
- Northampton Corporation Act, 1922.
- Ministry of Health Provisional Orders Confirmation (No. 1) Act, 1925.
- Northampton Extension Act, 1931.
- Ministry of Health Provisional Order Confirmation (Northampton) Act, 1932.
- The Northampton (Scarletwell Street) Housing Confirmation Order, 1933.
- The Northampton (Phoenix Street) Housing Confirmation Order, 1935.
- Northampton (Extension of Time) Order, 1935.
- The Northampton (Russell Terrace) Housing Confirmation Order, 1935.
- The Northampton (Swan Street) Housing Confirmation Order, 1935.
- The Northampton (Foundry Street No. 1) Housing Confirmation Order, 1935.
- The Northampton (Foundry Street No. 2) Housing Confirmation Order, 1935.
- The Northampton (Tanner Street) Housing Confirmation Order, 1935.
- The Northampton (Lower Harding Street) Housing Confirmation Order, 1936.
- The Northampton (Crispin Street) Housing Confirmation Order, 1936.
- The Northampton (Weston Row) Housing Confirmation Order, 1936.

The Northampton (Spring Lane No. 1) Housing Confirmation Order, 1936.

The Northampton (Spring Lane No. 2) Housing Confirmation Order, 1936.

The Northampton (Horsemarket) Housing Confirmation Order, 1936.

The Northampton (Weston Street) Housing Confirmation Order, 1936.

Blind Persons

Particulars of the provision made for blind persons under the Blind Persons Act, 1920, were given in my report for 1931, pages 17 and 18. The Act is administered locally by the Blind Persons Committee, consisting of His Worship the Mayor and twelve members, eight being members of the Borough Council and four co-opted. At the end of 1936, there were 194 persons whose homes are in the Town certified as blind within the meaning of the Act, *i.e.*, "so blind as to be unable to perform any work for which eyesight is essential." All the certificates were granted after examination by E. H. Harries-Jones, Esq., M.D., or Dr. S. H. G. Humfrey, Honorary Ophthalmic Surgeons to the General Hospital. From 1st April, 1936, all cases admitted to the register have been certified on Form B.D.8, which was devised by the Prevention of Blindness Committee and is approved by the Ministry of Health. Of these 194 blind persons :—

- 5 were St. Dunstan's trained men working at home ;
- 4 were in a residential home ;
- 4 were in the County Mental Hospital ;
- 6 were in St. Edmund's Hospital ;
- 1 was a child at school ;
- 23 were employed in the Workshops, Gray Street
(18 males and 5 females) ;
- 3 were employed as homeworkers ;
- 3 were employed elsewhere ; and
- 145 were classified as unemployable and were living at home
or in lodgings.

No action was taken under Section 66 of the Public Health Act, 1925, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes. These are all well catered for by the Ophthalmic Department of the General Hospital. From the above remarks it must not be inferred that the Local Authority takes no interest in the prevention of blindness, for the contrary is the case, both the Maternity and Child Welfare and the Education Committees being concerned in the matter. Every baby notified as suffering from ophthalmia neonatorum (a fruitful cause of blindness in the past) is at once visited by one of the health visitors who recommends specialist treatment at the General Hospital in severe cases. No instance of permanent damage to the eyes

of any baby following ophthalmia neonatorum has occurred in Northampton for many years. All school children suffering from any abnormal eye condition or defect receive treatment and advice at the School Clinic and are sent to the specialists at the General Hospital when necessary.

The Medical Officer of Health, acting as School Medical Officer in an administrative capacity, keeps the Public Health and School Medical Departments in close touch with each other. Dr. Mason, the Assistant School Medical Officer, has again been able to carry out the medical inspection of school children without any outside help.

School
Medical
Service

The chief event in connection with the school medical service was the opening on 3rd September of the Nursery School in Silver Street, with grounds adjoining those of the School Clinic in King Street. It was an event of far-reaching importance from the point of view of preventive medicine, as the children in attendance, aged two to five years, will be under the close supervision not only of the teachers but also of Dr. Mason, who will be able to detect any abnormality in the early stages instead of its being brought to his notice some years later. Prevention, or at least early treatment, are the points to be aimed at in building up an A1 population.

The whole-time staff employed on school medical work consists of one medical officer designated Assistant School Medical Officer, two dentists, three nurses, and four clerks. An ophthalmic surgeon and a radiologist are employed part time and an ear, nose, and throat specialist is engaged for the removal of tonsils and adenoids.

The average number of scholars on the registers of public elementary schools for the year ended 31st December, 1936, was 11,165, the average attendance being 10,277 (92·0 per cent.).

The annual report of the School Medical Officer, prepared according to the requirements of the Board of Education for the Education Committee, is published separately and gives details of the work performed by the school medical service. (*See also "Schools," page 25*).

III.—SANITARY CIRCUMSTANCES.

In my survey report for 1930 I gave the sources of the Borough water supply. Owing to the high level of the water at Ravensthorpe at the commencement of what is usually looked upon as the dry period of the year, combined with a rainfall above the average during 1936, there was never any danger of a shortage of the supply, consequently no emergency measures for conservation, such as limiting the supply of water to certain hours, were necessary.

Water

As mentioned in last year's report, work on the new reservoir in the Hollowell Valley was commenced in April and is still in progress.

The average daily consumption of water per head of the population was 22·63 gallons, sufficient for the needs of the Town ; the staple industry is not one requiring a large volume of water as is the case with bleaching, dyeing, etc.

The purity of the public supply was above suspicion during the whole of the year. Twenty-one samples, drawn from various points of delivery, were submitted to Professor R. T. Hewlett for bacteriological examination and in every instance the water was found to be of a high degree of bacteriological purity.

Polluted Well

The polluted well supplying an isolated dwellinghouse, mentioned in my last report, was dealt with during 1936 by the house becoming vacant and no longer being let as a dwelling. This was brought about by the surrounding land being developed as a building estate.

Drainage and Sewerage

A description of the sewerage system of the Borough was given in my report for 1933. It continues to function satisfactorily.

The Borough Engineer has kindly supplied the following information regarding sewerage work carried out by, or under the supervision of, his Department during the year :—

CONTRACT WORKS :—

Far Cotton Main Drainage Extension ;
Kingsthorpe Main Drainage Extension.

DEPARTMENTAL WORKS—DIRECT LABOUR :—

Abington Housing Estate ;
London Road ;
St. David's Housing Estate ;
Spencer Bridge Road Housing Estate ;
Swan Street ;
Welford Road.

BUILDING SITES DEVELOPED BY PRIVATE ENTERPRISE (only partly completed) :—

Bant's Lane ;
Blyth Estate, Far Cotton ;
Bush Hill ;
Kingsley Road ;
Welford Road.

Rivers and Streams

At no time during the year was that part of the river Nene which flows through the Borough in such a state as to cause any serious nuisance or to be dangerous or injurious to health.

No conversions from pail closets or privies were carried out during the year. As most of the houses still supplied with pail closets or privies are in the village of Dallington and were represented in connection with slum clearance, no further action was taken.

Closet
Accommo-
dation

This work forms part of the duties of the Highways Department and was performed satisfactorily. The methods of scavenging in use in the Borough were explained on pages 23 and 24 of my report for 1930.

Public
Cleansing

The work of the sanitary inspectors is summarised in Table 5 (page 85) and Tables 6 and 7 give further particulars in connection with house drainage. During the year, 2,141 houses were inspected, of which 1,320 were found to require some attention, with the result that 1,016 were repaired, 966 were cleansed and whitewashed, while others were dealt with as the conditions required, details of which appear in Table 5.

Sanitary
Inspection

All houses inspected in what is called "house-to-house inspection" are now measured to check, amongst other information, the number of persons permitted to occupy a particular dwelling so as to comply with the Housing Act, 1936—Part IV., Abatement of Overcrowding.

As mentioned in my last report, certain provisions of this Act are administered by sanitary authorities, viz :—subsections (1) and (2) of Section 10, which deal with sanitary and other arrangements in shops, chiefly heating and ventilation. The Local Authority appointed the Inspector of Weights and Measures to be the inspector under the Act, and on his finding any premises where the regulations as to ventilation, temperature, or sanitary arrangements are apparently not complied with, he reports to this Department. During 1936 he referred 164 premises to us involving such contraventions. The sanitary inspectors paid 198 visits and steps were taken, where necessary, to cause this part of the Act to be complied with.

Shops Act,
1934

Smoke from factory chimneys is not a common source of nuisance in Northampton, as most of the factories are operated by electricity or gas engines. The few chimneys which exist are kept under observation by the district inspectors, but we have no bye-laws relating to the emission of black smoke. From time to time we receive complaints of offensive fumes due to persons burning leather chips in grates or furnaces not suitable for the purpose, *e.g.*, ordinary fireplaces or under washing coppers. So far these nuisances have been abated without our having to take legal proceedings.

Smoke
Abatement

Swimming Baths and Pools

The Borough Council provides swimming facilities in open-air baths or swimming pools at three points in the river Nene as it flows through the Town, viz :—(1) at Kingsthorpe, where the river enters the Borough, (2) at Miller's Meadow, and (3) at Midsummer Meadow. This latter establishment is the largest of the three open-air pools, the water used being obtained from the Northampton Electric Light and Power Company's works, where after chlorination and heating in the condensers it is piped under the river to the swimming pool. There is also an indoor swimming bath attached to Barry Road School, owned by the Education Committee.

On 3rd October, the new Northampton Corporation Swimming Baths, erected on the Upper Mounts at an approximate cost of £52,500, were opened by the Right Hon. The Lord Burghley, M.P., J.P., in the presence of a large gathering of members of the Council and their wives, the chief officials of the Corporation, and the general public. The buildings, which were designed by Messrs. J. C. Prestwich & Sons, of Leigh, Lancashire, were erected by Messrs. A. Glenn & Sons, Ltd., Northampton, whose tender was accepted by the Council on 3rd December, 1934. Work was commenced in January, 1935, and the foundation stone was laid by His Worship the Mayor (Alderman A. Burrows, J.P.) on 12th September, 1935. The new public baths form the second section of the group of civic buildings to be erected on the site of the old prison on The Mounts. The swimming pond is 100 feet by 40 feet and holds 131,000 gallons of water, the depth varying from ten feet to three feet. Seating accommodation is provided for over six hundred spectators. In addition to the swimming pool, there are twenty-two slipper baths (twelve for men and ten for ladies), also Turkish and medicinal baths. A filtration and chlorination plant ensures clean sterilised water to the bathing pool and Turkish bath plunge, with a complete turnover once every four hours. The whole forms one of the latest and most up-to-date bathing establishments in the kingdom.

In addition to these municipal swimming baths, there is at Franklin's Gardens a privately-owned open-air bath constructed on modern lines and provided with filtration and chlorination plants.

No steps were taken by the Public Health Department for ensuring a proper standard of cleanliness and purity of the water in any of these baths, as there was no reason to suppose it was otherwise than satisfactory.

Eradication of Bed Bugs

During the last few years, whilst slum clearance has been so much in the public eye, a subject has come into prominence about which little was formerly heard, viz :—the disinfection of vermin-infested houses and furniture. The following information is given in the form required by the Ministry of Health :—

- (1) The number of Council houses found to be bug infested during 1936 was seventy-eight.
- (2) The methods of disinfestation were :—
 - (a) The use of an insecticide spray ;
 - (b) Fumigation by means of sulphur candles, *i.e.*, sulphur dioxide gas ;
 - (c) Treatment by means of a blow-lamp. Where it is found necessary the woodwork (skirting boards, picture rails, etc.) are removed prior to treatment.
- (3) The furniture of incoming tenants is treated before removal to new houses. Soft articles (clothing, bedding, etc.) are disinfested by steam at the Public Health Committee's Disinfecting Station, St. Andrew's Road. Other furniture or articles which would be ruined by steam disinfection are sprayed with an insecticide.
- (4) The work of disinfestation is carried out by officers of the Local Authority. No use has been made of hydrogen cyanide gas, as it is considered to be too dangerous, several tragedies having occurred elsewhere from its use in spite of its being in the hands of experts or fully-trained men.

No definite amount of bug disinfestation has been undertaken in connection with privately-owned dwellinghouses, but wherever it has been found necessary some form of advice as to the use of insecticides has been given and the soft furnishings have been removed for treatment by heat at the Disinfecting Station. By this method, any infestation has been kept in check, but the number of complaints received during the year from privately-owned houses was almost negligible.

The Medical Officer of Health (the nominal School Medical Officer), together with the Assistant School Medical Officer and the sanitary inspectors, kept the sanitary conditions of the schools under observation during the year. Schools

There was a decrease in the incidence of scarlet fever, whilst diphtheria remained at a low ebb. Measles and whooping cough did not cause any serious loss of time in any of the schools.

The Annual Report under the Canal Boats Acts was dispatched to the Ministry of Health before the appointed date, viz :—21st January. Mr. W. L. Monks, the inspector under the Acts, inspected thirty-two boats, registered to carry 105 adults ; the actual number of persons on board was fifty-one adults and nineteen children. Ten boats were travelling without certificates and six without being properly marked. No legal proceedings were taken ; letters were sent to defaulting owners. No case of infectious disease occurred in connection Canal Boats

with any boat. The number of boats on the register believed to be in use is three. Much as one would like to see a revival of traffic on the canals (water-borne being the cheapest means of transport), I am afraid it is too slow for this modern age where speed seems to be the chief consideration.

Common Lodging Houses

There were three common lodging houses on the register at the end of the year. These were registered to accommodate 146 men. They were visited regularly by Inspector Walker and from time to time by the Medical Officer of Health and the Chief Sanitary Inspector.

As mentioned in my last report, a Compulsory Purchase Order made on the common lodging house numbered 71, Horsemarket was confirmed by the Minister of Health on 25th April, 1936, but the building was still in use at the end of the year. The question of accommodating the lodgers from this house has been under consideration by the Public Health Committee, but no action has been taken by the Corporation regarding the erection of a municipal lodging house. The lodging house situate at No. 52, Broad Street was extended by the taking in of two adjacent cottages providing sleeping accommodation for an additional seventeen men, bringing the total for this house to sixty. The day room was also enlarged. When No. 71, Horsemarket is closed, as it will be shortly, there will be registered accommodation for ninety-four men in the two remaining lodging houses.

We have no houses let in lodgings or bye-laws in connection therewith.

Factories and Workshops

Table E, at the end of this volume, gives particulars of work done under the Factory and Workshop Act, 1901, set out in the prescribed form. The general scheme under which the Act is worked is that H.M. Inspector of Factories supervises the sanitary condition of all the textile and non-textile factories, leaving the sanitary authority to take charge of workshops, workplaces, and domestic factories. If the Factory Inspector finds an insanitary condition in a factory he refers the matter to the local sanitary authority for necessary action.

Offensive Trades

No applications to commence offensive trades were received and the number of names on the register remained as for several years past, viz :—two tanners, three tripe boilers, and one firm of soap makers and fat boilers. These trades were carried on without causing any serious nuisance. The premises were kept under observation, but no infringements of the bye-laws were observed.

Tents, Vans, Sheds, etc.

The shack dweller mentioned in my last report, who had been under observation for some considerable time, died during the year and the shack has since remained unoccupied.

Three van-dwellers, who appeared to be attempting to make their residence permanent on the Cattlemarket Fair-ground, were given notice to quit. Two complied with the notice and moved outside the Borough. The third took up his stand on a fresh piece of ground. Notices were served on him, also on the persons who had sub-let the land to him and on the owner of the land, calling upon them to conform with the bye-laws. As no attempt was made to comply with the notices, proceedings were taken against all three and the cases came before the Borough magistrates on 13th January, 1937, when an Order was made for the caravan to be removed from the land and the defendants had to pay the costs of the summonses. The van was moved out of the Borough next morning.

Particulars of these, excepting the above-mentioned, will be found in Section V. (pages 35 to 42) dealing with food, as they comprise cowsheds, dairies, bakehouses, slaughterhouses, ice cream shops, etc.

Premises
controlled
by Bye-
laws, etc.

The premises where rag flock is used in the manufacture of low-priced furniture, cushions, etc., were visited by the Chief Sanitary Inspector on ten occasions for the purpose of examining invoices to ascertain if they guaranteed that the flock reached the standard prescribed by the Rag Flock Regulations, 1912. As all the invoices were found to be in order, no samples were taken. The object of the Acts was explained in my report for 1930, viz :—to ensure that old rags contaminated by excremental matter are not used for the upholstering of low-priced furniture.

Rag Flock
Acts, 1911
and 1928

The Borough Rat-catcher, working under the supervision of the Chief Sanitary Inspector in his official capacity of Rat Officer, is at the service of any ratepayer requiring his help or advice in ridding his premises of rats. The number of rats in this country is not known, but it is undoubtedly very great and it has been said by persons of wide experience that there are as many rats as people in England and Wales. The damage done by these rodents every year runs into millions of pounds. During the year, 3,126 rats were accounted for. No official "rat week" was held, as we believe steady work throughout the twelve months produces the best result.

Rat
Repression

I regret to say that the Rat-catcher suffered from leptospirosis (Weil's disease) early in the year and as cases of this disease are comparatively rare, a full account of the circumstances is given in the section dealing with infectious and other diseases, page 51.

IV.—HOUSING.

Council
Houses

The Borough Engineer has supplied the Department with particulars of the progress made under the municipal housing schemes :—

Number of Council houses completed during 1936 ..	187
Total number of houses erected by the Corporation up to 31st December, 1936	3,928

Other New
Buildings

In addition to the above, the following private building operations, plans for which had been approved by the Highways Committee, were carried out during the year :—

Houses (private enterprise)	560
Shops and houses combined	13
Block of flats (40)	1
Conversion of houses into flats	2
Additions to houses	12
Shops and offices	13
Reconstruction of shops and offices	9
Conversion of public house into shops and offices ..	1
Lock-up shops	5
Shop-fronts to dwellinghouses	9
Factory	1
Bacon factory	1
Extensions to factories and warehouses	10
Additions to laundries	2
Bakehouses	2
Cowsheds	2
Dairies	3
Additions to place of worship	1
Parochial buildings	1
Hospital extensions	4
Young men's institute	1
Sports pavilions	2
Licensed premises	2
Alterations to licensed premises	5
Extensions to clubs	2
Cinema	1
Service garages	5
Motor houses	119
Coal and cycle sheds	6
Water closets and lavatories	12
Omnibus shelters (temporarily licensed)	7
Temporarily licensed buildings	5

Housing
Acts

Table 8 (page 88) contains particulars of unfit houses represented by the Medical Officer of Health during 1936 under Section 19 of the Housing Act, 1930. It will be seen that twelve individual dwellinghouses were represented during the year

because they seemed to be unfit for human habitation and were considered not capable of being rendered fit at a reasonable expense. Table 9 (page 89) gives the action during 1936 concerning houses not finally dealt with by the end of the previous year. Eighteen Demolition Orders were made by the Town Council and at the end of the year the making of a Demolition Order in another instance was under consideration. Twenty-two houses were demolished in pursuance of Demolition Orders ; one house which was represented in 1934, but was not subject to a Demolition Order, was also demolished. In five cases undertakings were accepted from the owners that the houses would not be used again for human habitation ; they are now used as stores. When the year closed, no house on which a Demolition Order was operative was still occupied.

No house was repaired under the provisions of Section 17 of the Housing Act, 1930.

The staff made 1,431 visits of house-to-house inspection under the Housing Consolidated Regulations, 1925 and 1932, and found defects in 1,064, chiefly want of cleanliness and repairs.

The progress made with Clearance Areas is mentioned under the heading " Slum Clearance," which follows.

Particulars of the overcrowding survey conducted under the Housing Act, 1935, are given on pages 31 to 33.

My annual reports for 1934 (pages 23 to 27) and 1935 (pages 26 and 27) contain details of the progress made with slum clearance under the Housing Act, 1930, and an account is given below of the action taken during 1936 :—

Slum
Clearance

CLEARANCE AREAS IN GROUP IV. Spring Lane Yard Clearance Order was subsequently withdrawn. No objections were received by the Ministry of Health to St. George's Square Clearance Order and this was confirmed, therefore, without amendment, by the Minister on 26th January, 1937.

The inquiry into Nelson Street Compulsory Purchase Order and Paradise Row and Nelson Street Clearance Orders was held on 14th July, 1936, when G. B. Bridgman, Esq., F.R.I.B.A., attended at the Guildhall to hear objections. These Orders were also confirmed on 26th January, 1937, subject to slight modifications in the case of both Nelson Street Orders rendered necessary because two houses had been demolished by the owners between the original representation of the Medical Officer of Health on 31st October, 1935, and the date of the inquiry.

CLEARANCE AREAS IN GROUPS V. AND VI. The following areas, called " Groups V. and VI." in the five-year programme, were officially represented to the Housing Committee by the Medical Officer of Health on 23rd March, 1936 :—

Clearance Areas.	Houses to be Demolished.	Persons to be Displaced.
Adelaide Place	7	15
Chapel Place	32	103
Clarke's Yard	12	41
Cliff Row	22	63
Groom's Yard	7	11
St. Edmund's Terrace	10	25
Totals	90	258

Five of the above ninety houses were vacant (one in Adelaide Place, one in Chapel Place, and three in Groom's Yard), so that the eighty-five occupied dwellinghouses were inhabited by 258 persons (204 adults and 54 children)—an average of 3.0 persons per house.

Cliff Row and St. Edmund's Terrace were dealt with partly by way of Compulsory Purchase Orders and partly by Clearance Orders. A Compulsory Purchase Order was made on Clarke's Yard and Clearance Orders in the case of Adelaide Place, Chapel Place, and Groom's Yard.

There were no objections in respect of Adelaide Place and Groom's Yard Clearance Orders, but a Ministry of Health inquiry was necessary regarding the other property and for this purpose G. B. Scotland, Esq., A.R.I.B.A., attended at the Guildhall on 2nd February, 1937. At the time of writing the Minister had intimated his intention of confirming all the Orders.

CLEARANCE AREAS IN GROUPS VII. AND VIII. These two groups, consisting of ninety-five houses in ten areas, were represented to the Housing Committee by the Medical Officer of Health on 22nd September, 1936 :—

Clearance Areas.	Houses to be Demolished.	Persons to be Displaced.
Arundel Street	5	18
Brook Lane	7	13
Castle Gardens	13	44
Dallington Road	14	42
Doddridge Street	19	68
High Street	7	24
Kingswell Road	10	18
St. Mary's Street No. 1	5	31
St. Mary's Street No. 2	10	19
Welford Road	5	14
Totals	95	291

Two of the houses were vacant (one in Castle Gardens Area and one in High Street Area). Thus the ninety-three

occupied dwellinghouses were inhabited by 291 persons (240 adults and 51 children)—an average of 3·1 persons per house.

No decision had been reached by the end of the year as to the way in which these areas should be dealt with.

SUMMARY. All the areas in the five-year programme, as expedited on the instructions of the Town Council, have now been represented. Altogether, including forty-one houses so far added in "grey areas," 785 houses may be demolished (occupied by 2,770 persons), to which should be added 184 individual unfit houses, making a grand total of 969 houses occupied by 3,398 persons.

The completion of this programme does not mean that slum clearance in Northampton has ceased. There are still bad houses to be scheduled and the policy of the Public Health Department will be to deal each year with one large area, or group of areas, comprising approximately 150 houses.

Table 5 (page 85) gives particulars of the work of the sanitary inspectors under these Acts.

Public
Health
Acts

No house was certified by the Medical Officer of Health under the terms of Section 46 of the Public Health Act, 1875.

An owner was summoned during the year for failing to carry out at two houses work for which notices had been served upon him under Section 94 of the Public Health Act, 1875. The Bench made an Order for the work to be done and Corporation costs to be borne by defendant.

Prosecutions

For prosecutions under the Food and Drugs (Adulteration) Act, 1928, *see* page 40 ; under the Public Health (Meat) Regulations, 1924, *see* page 40 ; under the Milk and Dairies Order, 1926, *see* page 37 ; and under the Bye-laws with respect to Tents, Vans, Sheds, etc., *see* page 27.

Last year I mentioned that the overcrowding survey under Section 1 of the Housing Act, 1935, had been nearly completed and that an account would appear in this year's annual report. The detailed report and tabulation were presented to the Public Health Committee in May, 1936, and forwarded to the Ministry of Health by the appointed date, viz:—1st June, 1936. The findings of the survey may be briefly stated as follows :—

Over-
crowding

The enumeration covered 21,964 houses occupied by 22,892 working-class families. 3,761 of these were Council houses occupied by 3,859 families. All the Council houses were included in the scope of the survey and it is estimated that 76·3 per cent. of privately-owned houses were also enumerated. Taking the Borough as a whole, the percentage was 79·5.

Only 191 families were found to be living in overcrowded conditions, according to the standard laid down in the Act,

and as no two families in any house were overcrowded, 191 houses were thus involved. No dwelling was overcrowded solely because it was not possible to separate the sexes.

The amount of overcrowding in all houses included in the survey was 0·87 per cent., and 0·83 per cent. of the families living in them.

In Council houses there were 80 cases of overcrowding, *i.e.*, 2·13 per cent. of the houses and 2·07 per cent. of the families inhabiting them.

In the houses in the slum clearance programme there were 16 cases of overcrowding, *i.e.*, 4·31 per cent. of houses and 4·21 per cent. of the families living in them.

In nearly two-thirds of the instances of overcrowding disclosed by the survey (122 out of 191), the degree was to the extent of one person or less.

The 191 families contained 1,339 "equivalent persons" and as the "equivalent population" of all enumerated houses was 73,536, the percentage of persons overcrowded was 1·82.

There was "equivalent accommodation" in the overcrowded houses for 1,112½ persons; the deficiency was, therefore, for 226½ "equivalent persons."

Of the 191 overcrowded families:—

161 occupied a whole house to themselves;

3 lived in flats;

17 were sub-tenants; and

10 were tenants overcrowded by reason of sub-letting part of the available accommodation.

There were 229 vacant houses, out of a total of 22,193 enumerated, representing a percentage of 1·0. There was accommodation in these for 1,872½ "equivalent persons." It will be noted that this is roughly one and a half times the "equivalent population" in the overcrowded houses and about eight times the deficiency of accommodation in the overcrowded houses.

The total accommodation in the 21,964 occupied and 229 vacant houses was sufficient for 173,296 "equivalent persons," whereas it was in fact occupied by 73,536 only.

5,356 families consisting of no more than three "equivalent persons" were occupying accommodation sufficient for eight persons each. 3,349 similar families occupied accommodation suitable for 9½ persons.

Although 191 families (0·83 per cent.) were overcrowded, only another 146 (0·64 per cent.) occupied the minimum accommodation allowed, and as many as 22,555 families (98·53 per cent.) had accommodation in excess of the minimum standard.

When the Ministry of Health published a report on the findings of individual surveys up and down the country, it was found that Northampton (0·8 per cent. of working-class families overcrowded) occupied second place amongst the eighty-three

county boroughs, being beaten only by Bournemouth (0·3 per cent.) and followed by Grimsby and Croydon (both 0·9 per cent.). The average percentage for the county boroughs was 4·2, but in some of the northern towns the figures ranged between ten and twenty per cent.

Between the completion of the original survey and the end of December, 1936, sixteen further cases came to light occasioned mainly by the increasing ages of children bringing them below the standard. The total number of overcrowding cases, therefore, for 1936 was 207, forty of which were relieved; 167 (occupied by 1,366 persons) were carried over to 1937.

Up to the end of 1936 we received 108 applications from landlords, agents, etc., to supply the "permitted numbers" for 4,352 dwellings.

By the end of December, 1936, the Corporation had erected 3,928 houses and it is estimated that private enterprise has been responsible for another 3,980 since the War, and both parties are still busily engaged in erecting more houses. From the above figures one would think we must soon be reaching saturation point so far as houses are concerned. From what one sees on visiting new building estates one gathers that most of the houses erected by private enterprise are built "for sale," in contradistinction to those erected by the Corporation which are wholly "to let." It is interesting to note that the proportion of the working classes who own their own houses is said to be larger in Northampton than in any other town in the kingdom.

Sufficiency
of Supply
of Houses

On 14th December, 1936, the Housing Department had on its books the names of 1,866 applicants for Council houses, of which 429 were living in rooms, 846 were tenants of privately-owned houses, and 275 lived outside the Borough. The number of persons living in rooms was less than half what it was at the end of 1935.

Out of 27,800 houses on the rate books on 31st December, 1936, it is estimated that 7,900 (or 28·4 per cent.) have been erected since the War—surely a surprising figure.

The number of empty houses found during the overcrowding survey which took place early in 1936 was:—municipal houses 13, privately-owned 216, a total of 229, being 1·0 per cent. of the 22,193 houses enumerated.

The particulars for 1936 are set out below in the form required by the Ministry of Health:—

Housing
Statistics

1.—*Inspection of Dwellinghouses.*

(1) (a) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	2,141
(b) Number of inspections made for the purpose	2,141

(2) (a) Number of dwellinghouses (included under sub-head (1) above) inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	1,431
(b) Number of inspections made for the purpose	1,431
(3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	197
(4) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	1,123
2.— <i>Remedy of Defects without Service of Formal Notices.</i> Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers	296
3.— <i>Action under Statutory Powers.</i> A.—Proceedings under Sections 17, 18, and 23 of the Housing Act, 1930 :—	
(1) Number of dwellinghouses in respect of which notices were served requiring repairs	0
(2) Number of dwellinghouses rendered fit after service of formal notices :—	
(a) By owners	0
(b) By Local Authority in default of owners	0
B —Proceedings under Public Health Acts :—	
(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied	852
(2) Number of dwellinghouses in which defects were remedied after service of formal notices :—	
(a) By owners	822
(b) By Local Authority in default of owners	0
C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—	
(1) Number of dwellinghouses in respect of which Demolition Orders were made	18
(2) Number of dwellinghouses demolished in pursuance of Demolition Orders	22*
D.—Proceedings under Section 20 of the Housing Act, 1930 :—	
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	0

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	0
4.— <i>Housing Act, 1935.—Overcrowding.</i>	
A.—(1) Number of dwellings overcrowded at end of year	167
(2) Number of families dwelling therein	167
(3) Number of persons dwelling therein	1,366†
B.—Number of new cases of overcrowding reported during the year	207
C.—(1) Number of cases of overcrowding relieved during the year	40
(2) Number of persons concerned in such cases	281†
D.—Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	Nil
E.—Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report	‡

*One more dwellinghouse was demolished after representation only.

†Equivalent number of adults = 1,189½ and 246½ respectively.

‡See notes on "Overcrowding," page 31.

Reference should be made to Section III. "Sanitary Circumstances" for other information bearing on housing.

Other
Housing
Matters

The estimated number of inhabited houses in the Borough on 31st December, 1936, was 27,800.

V.—INSPECTION AND SUPERVISION OF FOOD.

The number of milch cows housed in the Borough at the end of December, 1936, was 129. The premises of registered producers were kept under supervision by the district sanitary inspectors, with occasional visits from the Chief Sanitary Inspector and the Medical Officer of Health.

Milk
Supply

No great change has taken place in the proportion of pasteurised milk to the whole of the milk consumed in the Borough, but it can be said definitely that a slight increase in the former takes place from year to year. There is also reason to believe that there is an increased demand for sterilised milk, which was formerly wholly supplied from an out-of-town source; one of the registered firms in the Borough now carries out the process of sterilisation, and they inform me there is a slight increase in the sale of this kind of milk, the demand being greatest in the summer. There is no doubt a larger amount of

milk is consumed in the Town than was the case some years ago, one of the reasons being that a scheme similar to the milk in schools scheme fostered by the National Milk Publicity Council has been taken up by several factories.

The Milk Publicity Council held a "Milk Week" in the Town from 10th to 15th February, when lectures on milk and demonstrations on the uses to which it could be put were given to large audiences. Miss E. Haslam, the lady demonstrator, also gave addresses on the same subject at meetings at the maternity and child welfare centres.

Milk in Schools

The supplying of pasteurised milk in bottles during the forenoon to school children, at the cost of a halfpenny for one-third of a pint, continued. Children whose parents are adjudged by the Education Committee to be financially unable to pay for the milk receive it free. During the year, 1,147,039 bottles of milk, each containing one-third of a pint, were supplied in the schools. This is about thirty-five thousand fewer than in 1935, partly accounted for by there being fewer children on the school registers. The highest number of bottles of milk consumed in any one full week was 28,181 during the week ended 15th May, 1936, and the lowest was 20,314 in the week ended 31st January. The greatest number of scholars taking milk was 6,451 during the week ended 24th April and the smallest was 5,636 during the week ended 18th December.

Tuberculosis Order, 1925

Major J. J. Dunlop, M.R.C.V.S., D.V.S.M., the Veterinary Inspector appointed by the Local Authority under the Order, examined 127 milch cows in April and 129 in November with a view to ascertaining if any of them were suffering from tuberculosis. At the April inspection, one cow was found to be suffering from mastitis. A sample of milk from this cow was submitted by the Department for bacteriological test by inoculation for the presence of tubercle bacilli and was reported to be negative. No cows were suspected of tuberculosis or any other disease at the November examination.

Forty-two samples of milk were examined by inoculation tests for the presence of tubercle. Three samples were reported to shew the presence of the bacilli. Further samples were obtained from the same sources but all were reported to be negative, in other words no tubercle bacilli were found in any of the follow-up samples.

Dairies, Cowsheds, and Milkshops

At the end of December, eleven cowkeepers, 151 retail dairymen, and eight wholesalers were on the registers. Twenty-seven of these retailers live outside the Borough; their premises were inspected by the officers of the rural sanitary authorities and passed as fit for the purpose before they were placed on our register. In addition, 196 persons are allowed to sell milk in

bottles only, on condition the seal of the bottle is intact when it leaves the premises. These premises are places where conditions are considered unsuitable for the sale of loose milk. Thirteen certificates of registration were issued, twelve being transfers. The inspectors paid 615 visits to registered premises, during which defects were found in nine instances ; these were remedied.

An employee of a registered dairyman was fined ten shillings for bottling milk other than on registered premises.

The following licences under these Orders were in operation at the end of 1936 :—

Dealers' licences to use the designation " tuberculin tested " :—

Milk
(Special
Designa-
tions) Orders,
1923 and
1936

(a) bottling establishments	2
(b) shops	16

Dealers' licences to use the designation " pasteurised " :—

(a) pasteurising establishments	3
(b) shops	3

These licences were held by sixteen dairymen.

Sixty-two samples of milk were taken for bacteriological examination, viz :—eleven tuberculin tested, fifteen pasteurised sold as such, five pasteurised sold in bottles as ordinary milk, thirteen pasteurised sold loose as ordinary, seven ordinary milk in bottles, and eleven ordinary loose milk.

Three of the tuberculin tested milks failed to reach the standard prescribed in the Orders, either containing coliform bacilli in 0.01 ml. (millilitre) or the number of bacteria being too high, or both. The average bacterial count of the other eight tuberculin tested samples was 6,569, the highest being 43,200 and the lowest 370 per ml.

One of the pasteurised milks failed to comply with the requirements of the Orders. The average number of organisms in the other fourteen was 18,549 per ml., the highest 88,800 and the lowest 110.

The eighteen pasteurised sold as ordinary milk contained an average of 40,003 bacteria per ml., the highest being 394,800 and the lowest 800. The average count of the eighteen ordinary milks was 36,906 per ml., the highest being 244,000 and the lowest 600.

These results may be considered satisfactory and as shewing the care with which the bulk of the Town's milk is produced and distributed.

No change was made in the arrangements for food inspection, which include the inspection of meat, slaughter-houses, shops, stalls, and places where food is prepared or sold. One member of the staff is specially appointed as Meat and Food

Meat and
Other Foods

Inspector, devoting all his time to this work, whilst five of the other inspectors give a portion of their time (each man devoting Wednesday afternoon—the principal killing day) to it, the whole being supervised by the Chief Inspector. The plan has worked satisfactorily for years. Ante-mortem inspection is one of the duties of the Corporation Veterinary Surgeon who attends at the Cattlemarket every Wednesday and Saturday (market days). The total number of killings in the Borough is not known as no record is kept. Tables 10 and 11 (page 90) give particulars of food condemned.

No meat marking scheme under Part III. of the Public Health (Meat) Regulations, 1924, is in force in Northampton.

Disease in Meat

Table 11 (page 90) gives particulars regarding tuberculosis found in slaughtered animals and shews its prevalence amongst pigs and bovines. 59·5 per cent. of whole and 96·7 per cent. of part carcasses of beef and pork condemned were surrendered on account of being infected with tuberculosis. 263 part carcasses of pork were condemned by the inspectors and 261 of them were affected with tuberculosis, shewing how prevalent this disease is amongst swine. It is by far the most common disease found in slaughtered cattle and pigs. From this it is not to be inferred that every milch cow in which evidences of tuberculosis were found after slaughter was giving tubercle-infected milk. This depends upon the part of the animal affected, but in cases of long standing marked by emaciation the chances of the udder being implicated in the generalised tuberculosis are very real.

Section 117 of the Public Health Act, 1875

No seizure of unsound meat was made by the officers of the Department. All the meat condemned was either found by the inspectors at the time of slaughter or the inspector's attention was called to it by the butcher, who was willing to accept the officer's decision. The local butchers have amongst themselves an arrangement for contributing to a common fund out of which they receive compensation for diseased carcasses or parts of such as are voluntarily surrendered, on the certificate of the inspector, in other words a mutual insurance scheme, which is an excellent arrangement. It assists the unfortunate butcher, helps to keep up the standard of the meat supply, and promotes good feeling between the butchers and the inspectors of the Department.

Slaughter-houses

Forty-six slaughterhouses were on the register at the end of the year. Thirty-four of these were registered or licensed before the adoption of Part III. of the Public Health Acts Amendment Act, 1890. The remaining twelve are on annual licences renewable each January. The inspectors paid 4,667 visits of inspection during the year, 4,380 during actual slaughter-

ing. Twenty-four infringements of the bye-laws were discovered, the chief one being failure to whitewash at the proper time. These infringements were remedied without legal action.

Sunday slaughtering, about which I wrote in my last report, has not been abandoned, in spite of what might be called a tentative promise to end it.

The question of the provision of a municipal slaughterhouse has again been occupying the attention of the Town Council and other bodies, in some cases from a public health point of view and in other instances on humanitarian or sentimental grounds, but so far for various reasons, some very potent ones, no definite steps have been taken to establish one. To build a municipal abattoir or slaughterhouse and cause all slaughtering to take place in it is not such a simple matter as it seems to the uninitiated. In the first place, the cost would be a very heavy one for the building, and secondly, the compensation to be paid to butchers for closure of the existing slaughterhouses would also be heavy, but necessary, as one may be sure the public slaughterhouse would not be used to the full extent so long as the private ones remained open, and the Local Authority cannot close these old established premises by a mere stroke of the pen.

Is a municipal slaughterhouse necessary, first, from a health standpoint? The answer to this question is that we have no evidence (and our experience goes back many years) that the present arrangements are in any way detrimental to health or have been the means of causing or spreading disease. It is very easy for outsiders to make loose statements, but to uphold them when challenged is quite a different matter.

Secondly, there are the humanitarian aspects of the case. I will give place to no man or woman regarding my horror of cruelty to animals, but it is my opinion that butchers are no more cruel than other men (it is not in their interests so to be), and the procedures which take place in private slaughterhouses would be repeated in a public abattoir, but they would be all under one roof, which would not appear to me to lessen the alleged cruelty.

When it comes to the question of facilitating the inspection of meat, of course it would be easier for the Meat Inspector to visit and keep under observation one slaughterhouse instead of over forty, but whether this one advantage is worth the heavy cost the scheme would entail is for the Local Authority to decide.

The object of this Act and the duties it places on local authorities were explained in my report for 1933. All existing licences to slaughter or stun animals were renewable for a further three years as from 1st January, 1937, on which date the names of 177 slaughtermen were on the register.

Slaughter of
Animals
Act, 1933

Public
Health
(Meat)
Regulations,
1924

These Regulations, framed with the object of facilitating the inspection of meat, imposed upon butchers (amongst other things) the obligation of giving notice to local authorities of intention to slaughter either at fixed times on specified days, or if out of these usual times, three hours' notice must be given, except in case of emergency. 284 such notices were received during 1936.

One butcher was prosecuted for breaches of these Regulations and fined £6 5s. 6d., including costs.

Grading and
Marking of
Foodstuffs

The inspectors continue to carry out the duties imposed by the Merchandise Marks Act, 1926, and the Agricultural Produce (Grading and Marking) Act, 1928, and the numerous Orders thereunder.

Bakehouses

There were eighty-seven bakehouses on the register at the end of the year. To these the inspectors paid 306 visits of inspection, when forty-one infringements of the Act were discovered, chiefly failure to whitewash at the appointed times. These were all rectified without legal proceedings.

Other
Premises
dealing
with Food

Under this heading come premises where food is dealt with, other than those already mentioned, including those connected with the manufacture and storage of potted meats, jams, sweets, ice cream, etc. 1,328 visits of inspection were paid to these premises.

Food
Poisoning

No instance of suspected food poisoning came to the notice of the Department.

Food and
Drugs
(Adultera-
tion) Act,
1928

319 samples (including 120 informal) were taken under this Act by the sanitary inspectors and submitted to the Public Analyst. The nature of the samples is given in detail in Table 12 on page 91. Thirteen of them (4.1 per cent.) were found to be not genuine. Four of the defaulting samples were obtained informally, consequently no legal action could be taken regarding them. The nine official samples found to be not genuine were dealt with as follows :—

Sample No. 78 was a milk found to be 3.3 per cent. deficient in milk-fat. On the instructions of the Executive Committee of the Public Health Committee, a warning letter was sent by the Town Clerk.

No. 104 was a milk deficient in milk-fat to the extent of 13.3 per cent. Vendor was fined £3.

No. 112 was 1.7 per cent. deficient in milk-fat. Warned.

No. 178 was 24.3 per cent. deficient in milk-fat. Fined £1.

No. 180 was 10.7 per cent. deficient in milk-fat. Fined 10s. 0d.

No. 214 contained 17.0 per cent. of added water. Fined £2.

No. 219 was 6·3 per cent. deficient in milk-fat. Warned.

No. 230 contained 3·2 per cent. of added water. Warned.

No. 87, sold as malt vinegar, contained 100 per cent. artificial vinegar. Fined £2.

The average fat content of the 180 samples of genuine milk was 3·72 per cent. and the non-fatty solids 8·85 per cent.

One sample of skim milk was found to contain 0·30 per cent. of milk-fat.

There were no infringements of the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927. Preservatives, etc.

No action was taken under the Artificial Cream Act, 1929, the Public Health (Condensed Milk) Regulations, 1923 and 1927, or the Public Health (Dried Milk) Regulations, 1923 and 1927.

All chemical analysis required by the Local Authority is carried out by the Public Analyst to the Borough, Mr. A. Prideaux Davson, A.R.C.Sc.(Lond.), F.I.C., F.C.S., of Bermondsey. Chemical Work

No bacteriological examination of food (other than milk) was done, as none was required. The examination of milk for bacterial count was performed at the Pathological Laboratory of Northampton General Hospital, and for the presence of the tubercle bacillus at the Lister Institute of Preventive Medicine. Bacteriological Work

No special action was taken in connection with the dissemination of knowledge regarding nutrition or the relative values of food, beyond that involved in carrying out the maternity and child welfare scheme and an official recognition of the "Drink more Milk" campaign, which received the support of the Local Authority by the presence of the Mayor, the Chairman of the Public Health Committee, and the Medical Officer of Health at the opening of the week's milk exhibition and milk bar in February. Talks on food values are given by health visitors and the ladies of the Voluntary Committee at the weekly sessions of the infant welfare centres. Nutrition

There are no shell-fish beds or layings in this district. The shell-fish sold in the Borough are chiefly derived from layings at the following places:— Shell-fish (Molluscan)

Oysters	Whitstable, Kent; Colchester, Essex; American Blue Points (via Liverpool).
Mussels	Wells, Norfolk.
Winkles	King's Lynn, Norfolk; Lympstone, Devon; West Mersea, Colchester, Essex.

Cockles	King's Lynn, Norfolk.
Whelks	King's Lynn, Norfolk.
Crabs	Sea Houses, Northumberland ; Flamborough, Yorkshire ; Cromer, Norfolk.
Lobsters	Fraserburgh, Aberdeenshire ; Mevagissey, Cornwall.

No action was necessary by the Local Authority under the Public Health (Shell-fish) Regulations, 1934, or the Public Health (Cleansing of Shell-fish) Act, 1932.

VI.—PREVALENCE OF, AND CONTROL OVER,
INFECTIOUS AND OTHER DISEASES.

“Zymotic
Deaths”

During 1936, six deaths were certified as due to the so-called “ zymotic diseases,” giving a “ zymotic death-rate ” of 0·06 per thousand living, being by far the lowest rate of which we have record, our previous lowest being 0·14 in 1932. The term “ zymotic ” has not now quite the same meaning it formerly had, but the “ zymotic death-rate ” is still a very good and reliable guide to the general sanitary conditions of any district when used with discretion. The name “ zymotic ” was given to the group of diseases classified under that heading in the belief that they had some connection with the process of fermentation (hence the name “ zymotic ” from a Greek word meaning leaven). We now know that each of these diseases is due to a specific organism or germ which can be taken from the patient and grown on artificial media, injected into a second person or suitable animal reproducing the disease, and can again be recovered from the second person or animal, thus fulfilling Koch’s three postulates. The deaths from these diseases in 1936 are given below :—

	NUMBER OF DEATHS.	DEATH- RATES.
Diarrhœa (under two years)	2	0·02
Diphtheria	1	0·01
Enteric Fever	0	0·00
Measles	1	0·01
Scarlet Fever	0	0·00
Smallpox	0	0·00
Whooping Cough	2	0·02

Each of these diseases is dealt with separately in the next three or four pages.

Measles and
Whooping
Cough

As these diseases are not notifiable under the Infectious Disease (Notification) Act, 1889, our knowledge of their incidence is not very exact, but from the weekly returns kindly furnished by head teachers of public elementary schools, in which only ninety cases of measles or suspected measles were

reported, and from information supplied by Dr. J. H. Mason, the Assistant School Medical Officer, measles does not appear to have been very prevalent during the year. Three cases were treated in Harborough Road Infectious Diseases Hospital. One death, a child aged two months, was attributed to measles, giving a death-rate of 0·01, compared with 0·07 for England and Wales. As I mentioned in my last report, measles has not for some years been a serious problem in Northampton and no convalescent serum has been used either for prophylaxis or treatment.

There were 204 cases or suspected cases of whooping cough reported from the schools, the majority of them occurring during the last four months of the year. One was treated in the Infectious Diseases Hospital. There were two deaths attributed to whooping cough, viz :—a child aged fourteen months and another aged two years, giving a death-rate of 0·02, compared with 0·05 for the country.

Two children under two years of age died from enteritis, giving a death-rate from this cause of 1·7 per thousand live births registered. The corresponding rate for England and Wales was 5·9.

Diarrhœa
and
Enteritis

This subject is also mentioned on page 79.

This disease is not notifiable and it is unknown where comes the line of demarcation between influenza and what is called a common cold, the symptoms being much alike in the two conditions, perhaps aggravated in influenza, but be that as it may there were only nineteen deaths certified as due to influenza, of which five were said to be influenzal pneumonia. Eleven of these deaths occurred in the month of December. The local death-rate from this cause was 0·20, compared with 0·14 for England and Wales.

Influenza

Six notifications of enterica (three typhoid and three paratyphoid B) were received, of which two referred to patients brought into the Town for treatment at the General Hospital and not notified elsewhere, giving an attack-rate of 0·06, the same as for England and Wales. Of the remaining four Borough cases, one was removed to the Borough Infectious Diseases Hospital, where he was found to be not suffering from enteric, and was discharged in good health. Another was an institutional case and was nursed in the institution. One was treated in the General Hospital and one at home. All recovered. The death-rate for England and Wales was 0·01.

Enterica

Forty-eight notifications of erysipelas were received (two fewer than in 1935), including six out-of-town cases not notified elsewhere, giving an attack-rate of 0·50, compared with 0·40

Erysipelas

for England and Wales. One of the patients was treated at the Infectious Diseases Hospital, three at St. Edmund's Hospital, and eight at the General Hospital. Three deaths were attributed to erysipelas.

Chickenpox

This disease not being notifiable, except under special conditions, our knowledge of its incidence is not very exact, but there were 498 cases or suspected cases of chickenpox reported from the schools.

Vaccination

The three Public Vaccinators for the Borough remain as in the previous year, viz :—

Dr. E. Robertson, 220, Kettering Road ;

Dr. J. Cullen, 5, St. Matthew's Parade ;

Dr. H. F. Percival, 2, Spencer Parade.

These officers cover for vaccination purposes the same areas they serve for medical out-relief. (*See* page 16).

The Medical Officer of St. Edmund's Hospital also acts as Vaccinator.

Mr. F. Taylor and Mr. R. Bennett still officiate as Vaccination Officers. From the returns furnished by these officers it appears that of the 1,284 infants whose births were registered in the Borough during 1935, only ninety-one were successfully vaccinated, equal to 7·1 per cent.

During 1936, no vaccinations were performed by the Medical Officer of Health under the Public Health (Smallpox Prevention) Regulations, 1917.

Smallpox

No case of smallpox or suspected smallpox came to the notice of the Department during the year. Twelve cases were notified in England and Wales; no deaths were attributed to smallpox.

Scarlet Fever

One hundred and eighty-eight notifications of scarlet fever were received, which is less than half the number notified in 1935, and gives an attack-rate of 1·95 per thousand, compared with 2·53 for England and Wales. Seventy-eight related to males and 110 to females, and 116 referred to school children. For the last year or two there has been a tendency, not confined to Northampton, for the incidence of scarlet fever to fall more heavily on adults than was formerly the case, when it was something of a rarity to find an adult in the scarlet fever wards, whereas the same wards are now seldom without grown-up patients. The type of disease continued on the whole to remain mild. 141 cases were removed to the Infectious Diseases Hospital and one to the General Hospital owing to the need of specialist operation. There were no deaths in the Borough attributed to scarlet fever; the death-rate for England and Wales was 0·01,

Last year I gave a short account of the incidence of diphtheria in Northampton during the past sixty years and on pages 92 and 93 of this report will be found a table (No. 13) shewing the decline in the incidence of scarlet fever in the Borough since 1876. Those who did not see scarlet fever during the latter half of last century, and in some parts of the north during the early years of this present one, can scarcely realise what it was like. From a very serious, in fact often malignant, disease it has changed so much as to be now one of the mildest complaints, so mild as to cause some medical men to doubt if there is such a clinical entity. I repeat, if they had seen it thirty or forty years ago they would have had no doubt about it. How has this change come about? The answer is we do not know. It may be due to an attenuation of the virus, or to an increased resistance on the part of the host, or to both causes, but of the actual truth we are ignorant, and we have no proof that the disease will not flare up again some day as it did in the past. From the table it will be seen that there has been a fall in the deaths and also the death-rates since 1876, but from time to time there have been years when up to forty deaths in the Borough (with a much smaller population than our present one) were attributed to scarlet fever, compared with the one or two which occasionally occur in these days. The last serious visitation was in 1904, with another one of less severity twenty years later.

Sixty Years
of Scarlet
Fever in
Northamp-
ton

There were twenty-eight notifications of diphtheria during the year, giving an attack-rate of 0.29 per thousand of the population, the corresponding figure for England and Wales being 1.39. Seven related to males and twenty-one to females. All the notified persons were removed to the Borough Infectious Diseases Hospital (including one first admitted to the General Hospital as a possible tracheotomy), where six of them were found to be not suffering from diphtheria. One death was ascribed to diphtheria, a boy aged eleven years, who died in the Borough Hospital and who was infected by his younger brother, who was himself infected while out of town convalescing after chorea. The Northampton death-rate from this disease was 0.01 per thousand, compared with 0.07 for England and Wales.

Diphtheria

Thirty-seven phials (296,000 units) of antitoxin for curative or preventive treatment were issued free to general practitioners in the Town on application to the Public Health Department at a cost of about £12, this being in addition to the antitoxin used at the Infectious Diseases Hospital.

Again I wish to call attention to the continued very low incidence of diphtheria in the Borough producing what may be called a long low trough in the epidemic wave and again to emphasise the fact that this satisfactory state of affairs has not

arisen from, or followed, any campaign of active immunisation. If it had followed a course of prophylaxis, what an advertisement it would make for immunisation !

Pneumonia

One hundred and forty-eight notifications of pneumonia were received (one less than in 1935), giving an attack-rate of 1·54 per thousand, compared with 1·11 for England and Wales. Eighty-five related to males and sixty-three to females. Forty-nine were classed as broncho-pneumonia and twenty-five were said to have followed influenza, leaving seventy-four where the type was not stated. One was treated at Harborough Road Hospital, five at the General Hospital, and nine at St. Edmund's Hospital. In addition, fourteen deaths were certified as due to this cause (either primary or influenzal) for which no previous notification had been received, bringing the total number of known cases up to 162.

Fifty-seven deaths were attributed to pneumonia, of which twenty-eight were classified as lobar, twenty-four as broncho-pneumonia, and five as influenzal pneumonia. The death-rate from all forms was 0·59, slightly higher than in 1935.

Borough Hospitals

HARBOROUGH ROAD INFECTIOUS DISEASES HOSPITAL. A full description of this hospital appeared in my report for 1930 and further reference is made to it on page 15. Table 15 (page 94) gives the statistics for 1936. Owing to the relatively low number of notifications of both scarlet fever and diphtheria during the year, the beds in the hospital were never half occupied. The highest number of patients under treatment at any time was thirty-two, viz :—twenty-eight scarlet fever and four diphtheria, on 25th March. The average was 17·4 patients.

WELFORD ROAD TUBERCULOSIS HOSPITAL. Reference should be made to the reports for 1930 onwards and to pages 15 and 62 of this report. This hospital, with accommodation for thirty-two patients, was again made good use of, the average number of occupied beds being 31·1. Since a wider use has been made of this institution, *i.e.*, as a sanatorium as distinct from a place for the hopeless and dying, much of the prejudice against it has passed away.

SMALLPOX HOSPITAL. As no cases of smallpox or suspected smallpox were reported to the Department, the hospital remained closed, but was visited weekly by one of the porters from the Infectious Diseases Hospital and maintained in such a state as to be ready for the reception of patients in a few hours. For a description of the site, etc., see report for 1930. (*See also* page 15).

ST. EDMUND'S HOSPITAL. This hospital, containing 191 beds of which 162 were occupied on 31st December, 1936, is not under the management of the Public Health Committee, but is administered by the Public Assistance Committee as

part of a "mixed institution." This Committee consists of sixteen members of the Borough Council together with eight co-opted members. The patients are mostly chronic and infirm cases or persons suffering from inoperable cancer, etc. The nursing and attention these patients receive is of such a satisfactory nature that beds are seldom vacant; in other words, the demand equals the supply. With an efficient maternity department, it is unfortunate that more use is not made of these facilities considering the present call for institutional confinement. (*See also* page 15).

Five notifications of puerperal fever were received, giving an attack-rate of 4.00 per thousand total births registered, compared with 3.27 for England and Wales. Two referred to non-residents. Four of the cases were treated at the General Hospital and all recovered.

Puerperal
Fever

There were twenty-three notifications of pyrexia received, easily the highest number in any year since this condition became notifiable in 1926. The local attack-rate was 18.40 per thousand total births registered and the national rate was 9.64. Ten of the notifications referred to out-of-town women not notified in their own areas. Nineteen of these cases were treated in the General Hospital, where three died from sepsis, one being from out of town, consequently her death was treated as an "outward transfer."

Puerperal
Pyrexia

Seven notifications of ophthalmia neonatorum were received; five related to midwives' cases, one was a doctor's case, and one occurred in an institution. Neisser's organism is said to have been found in the discharges from the eye in one instance. None of them appears to have been a very severe case. All cleared up without any impairment of vision.

Ophthalmia
Neonatorum

During the year there was a small outbreak of pemphigus affecting possibly four newly-born infants, three of whom definitely suffered from pemphigus, whilst the fourth was only suspect. All the cases were connected through the person of the midwife who herself appeared to be a healthy woman and shewed no signs of any skin lesion at the time of the outbreak. Two of the babies were treated in hospital (one at the General Hospital, the other at the Borough Infectious Diseases Hospital). The first case in point of date is the one which is suspect; about the other three there could be no doubt regarding the diagnosis. All four recovered. The usual precautions, including disinfection and temporary suspension of the midwife, were carried out and there was no further spread.

Pemphigus
Neonatorum

Venereal
Diseases

146 Borough residents received treatment for the first time at the Special Clinic for venereal diseases at Northampton General Hospital, under the combined scheme worked in conjunction with the County Councils of Northamptonshire and Buckinghamshire. The classification of these new cases was as follows :—

CONDITION.	MALES.	FEMALES.	TOTAL.
Syphilis	25	16	41*
Gonorrhœa	62	7	69
Other than Venereal	21	15	36
Totals	108	38	146

(*Fourteen male and nine female syphilis cases were of more than one year's standing).

From the returns furnished by the Senior Medical Officer of the Treatment Centre it appears that eight syphilis (seven male and one female) and twenty-six gonorrhœa (twenty-one male and five female) patients, including persons under treatment at the commencement of the year, carried out the full courses of treatment recommended by the specialists in charge of the Clinic and were discharged after final tests of cure.

On the other hand, fifteen syphilis patients (eleven males and four females) and fourteen gonorrhœa patients (thirteen males and one female) ceased attending before completion of treatment or before final tests as to cure were made. I have mentioned defaulters in previous reports and so far no means of preventing their occurrence has been devised. Any attempt at compulsion would in all likelihood lead to a reduction in attendances at the Clinic. The principle of the scheme is that it shall be free and optional.

The total attendances made by Borough patients at the out-patient clinic were 5,817 and 249 days were spent in hospital by patients. This latter figure is nearly twice that for the previous year.

In the treatment of syphilis, 724 doses of approved arseno-benzene compounds (stabilarsan or sulfarsenol) were administered. In connection with the scheme, 834 specimens were examined by the Pathologist at a cost of £190 3s. ; 525 specimens were on behalf of the Treatment Centre, 230 for hospitals and other institutions, and 79 for local practitioners.

The Borough Council makes an annual grant of £23 to the British Social Hygiene Council for propaganda purposes.

Two deaths were certified as due to syphilis, one being congenital.

Cancer

Cancer, so far as both prevention and cure are concerned, remains much as it was when I gave an account in my annual report for 1930 (pages 47 to 49) of the position occupied by

cancer in the local death returns over a period of forty years. In spite of the large amount of time and money which has been expended in research, the cause of the disease still remains obscure. True, certain forms of cancer have been found to follow irritation, *e.g.*, spinner's cancer following irritation set up by certain mineral oils, but the fact remains that for the vast majority of malignant growths the cause is as yet unknown, and until it is discovered no reliable cure can be expected. At present the chief hope of cure lies in early operation (using the term in its widest sense), which in turn necessitates early diagnosis.

The Local Authority has no facilities for early diagnosis or treatment of the disease at St. Edmund's Hospital, which is administered by the Public Assistance Committee as part of a mixed institution. All cancer cases admitted there are either too advanced for operation or have already been operated upon and followed by a recurrence, the all too common history of this complaint. Facilities for early diagnosis and treatment, including the use of radium, exist at Northampton General Hospital and if any patient suffering from the disease at a stage amenable to treatment be admitted to St. Edmund's Hospital, he or she would be transferred to the General Hospital.

The Local Authority has taken no part in so-called anti-cancer campaigns, as it is very doubtful if these serve any useful purpose, in fact they may do harm by engendering a sense of fear in nervous persons, who may think they are suffering from cancer when their fears are groundless, while at the same time they are too nervous to visit their own medical adviser or the General Hospital to have their minds set at rest.

As mentioned in the 1930 report, it is only to be expected that deaths from cancer will now shew up more conspicuously in the tables of mortality than they did up to the end of last century, due chiefly to two causes, viz :—the great advances made in diagnosis, and secondly, to the change in the age-constitution of the population of England and Wales, including Northampton. Since the commencement of the present century, due to the remarkable fall in the birth-rate at one end of the scale and the prolongation of life at the other, the age-distribution of the people has so far changed that in spite of the increase in the population as a whole there has been a decrease of nearly a quarter in those aged under twenty-five years, with a corresponding increase in those of a cancerous age, say over fifty.

Three tables are inserted in Appendix III. on pages 95 to 97. Table 17 gives the local death-rates back to 1881, Table 18 the age and sex incidence since 1911, and Table 19 an analysis of the sites of the body principally affected in persons dying from cancer during the last six years.

The number of local deaths ascribed to cancer during 1936 was 168 (86 males and 82 females), seven more than in 1935.

The death-rate was thus 1·74, compared with 1·63 for England and Wales.

No investigations on the lines suggested in the Ministry of Health's series of circulars have been undertaken by the Public Health Department.

Prevention of Blindness

The information required by the Ministry of Health will be found in the paragraph headed " Blind Persons " on page 20.

Tuberculosis

Dr. N. B. Laughton, the Clinical Tuberculosis Officer, presents the eighteenth report of the series on anti-tuberculosis work in the Borough (*see* Appendix I., pages 55 to 71).

Dr. Laughton calls attention to a matter in connection with tuberculosis which is engaging the attention of workers in this branch of preventive medicine throughout the country, and one to which no solution has so far been found though several explanations (none of them satisfactory in my opinion) have been given, viz:—the failure of all measures tried up to the present to reduce the death-rate from this disease in young adults, aged roughly fifteen to twenty-five years. While there has been a marked fall in the death-rate from pulmonary tuberculosis in the younger age-groups (children) and also in those aged forty-five to sixty, there has been no corresponding fall in either men or women aged fifteen to twenty-five, in fact the deaths in this age-group are inclined to rise. The patients, when they present themselves for examination for the first time, are often found to be in such an advanced stage of the disease that not only is cure out of the question but it is evident the end will not be long delayed. Why is this? The patients as a rule do not give a history of long illness, in fact many of them only admit to having felt unwell for a short period, and in many instances they have been working almost up to the time of notification. As previously mentioned, several explanations have been offered, such as stress of modern life, late hours, under-nourishment, etc., all bad in themselves, but none of them (in my opinion) a satisfactory one. Until we can prevent this wastage of adolescent and young adult life I do not think we can expect any further marked diminution in the mortality from tuberculosis. Though the death-rate from this disease continues to fall slightly year by year, much of this reduction is probably due to the change in the age-constitution of the people, dependent upon the remarkable fall in the birth-rate and the extension of life at the other end of the scale, in other words it is largely due to the increased proportion of the population being at a less susceptible age than was the case at the commencement of the present century.

The total tuberculosis death-rate in Northampton for 1936 was 0·64 (respiratory 0·56 ; other forms 0·08), this being the lowest total rate ever recorded in the Borough. The

corresponding figures for England and Wales were 0·69 (respiratory 0·58 ; other forms 0·11).

Early in 1936, A.P., aged forty-four years, the Borough Rat-catcher, suffered from Weil's disease, a condition known to be associated with rats, being the first instance of which we have record where a professional rat-catcher has been shewn to be infected. The chief points in connection with the case are as follow :—

Lepto-
spiro-
sis
(Weil's
Disease)

P. got wet through in the course of his work on 29th January and felt ill the same night. Next day he complained of shivering, headache, pain in the limbs, and vomiting—symptoms resembling influenza. On 3rd February his medical attendant noticed he was becoming jaundiced, which aroused suspicion that there was something more than influenza present, as jaundice in a rat-catcher who is said to be suffering from influenza points strongly to Weil's disease. On 14th February a specimen of the patient's blood was forwarded to the Ministry of Health's Pathological Laboratory where it was examined and found to be positive 1 in 300, with a trace at 1 in 1,000, leaving no doubt as to the diagnosis. P. was admitted to Northampton General Hospital on 15th February, still jaundiced, with slight symptoms of bronchitis, and a normal temperature. During the next few days his temperature rose again to 100·6°, the highest it had been before admission to hospital. Spirochætes were never found in the urine. He made a rather slow recovery and was discharged on 13th March still in a weak state and very emaciated, resuming work on 15th April after seventy-six days' absence.

The three outstanding features of the case were :—(1) the symptoms resembling influenza, (2) the very pronounced jaundice, and (3) a thinning of the hair during convalescence. It is my opinion there was no connection between his getting wet and the onset of the disease, or only in the same way that during the late War in the Near East it was noticed how a chill often brought on a relapse of malaria in a person who was apparently until then in good health.

Table 20, which gives particulars of clinical bacteriology, etc., will be found on page 98. The general arrangements for bacteriological work, outlined on page 12 of my report for 1930, still hold good.

Bacteriology

Table 16 (page 94) shews the number of articles stoved each month at the Disinfecting Station, St. Andrew's Road.

Disinfection,
etc.

No special provision is made for the cleansing and disinfection of verminous persons, other than that existing at St. Edmund's Hospital, Wellingborough Road. The Department does not receive applications for such treatment.

No anti-mosquito work was carried out, as none was necessary. The Department did not receive any complaints regarding the prevalence of mosquitoes and no case of locally-infected malaria came to our notice during the year.

VII.—MATERNITY AND CHILD WELFARE.

General Remarks

The sixteenth annual report of the Assistant Medical Officer for Maternity and Child Welfare on the work of that Department will be found in Appendix II., pages 72 to 82, where it follows the lines of its predecessors.

No change occurred in the personnel of the whole-time staff during the year.

Infant Mortality

Again we have to record a low infantile death-rate, viz :— 39·9 per thousand live births registered, compared with 59 for England and Wales and 63 for the great towns. The Borough has on several occasions had a very low rate, but never in its long history has it touched such a remarkable figure as the present one, which is less than a fifth of the usual rate in several of the great industrial towns at the commencement of the present century. It is well to remember that the social and climatic conditions in the southern half of the country, say south of a line drawn between the Mersey and the Humber, are much kinder to infantile life than those which prevail in the north. As usual the chief cause of death in infants was prematurity. When we find a means of preventing premature births we may look forward to a still lower infant death-rate, but until some such means is discovered I see little chance of any further marked fall.

Maternal Mortality

There were four maternal deaths (three from sepsis and one from other puerperal causes) amongst Northampton mothers during 1936, giving a rate of 3·20 per thousand total births registered (sepsis 2·40; other puerperal causes 0·80), compared with 3·65 (sepsis 1·34 ; other puerperal causes 2·31) for England and Wales. It may be of interest to note that none of these women attended the Borough ante-natal clinic, though too much stress should not be laid on that fact for two reasons, viz :— the figures are small, too small to draw much conclusion from, and secondly, it is quite impossible to say by ante-natal examination who will develop sepsis after confinement. There is probably some factor at present unknown which goes a long way towards determining this important matter. In other words, there may be something over and above the mere question antiseptis, important as that is.

Toddlers

Children aged one to five years, that is those under the legal school age, continue to receive increased attention not only from

the Maternity and Child Welfare Department but also from the Borough Education Committee, who in September opened a very fine nursery school for children of pre-school age, two to five years, *i.e.*, toddlers, though the Education Authorities do not call them by that name.

No case came to the notice of the Department where any mother or child suffered any ill-effects or even inconvenience due to inability to obtain the services of a doctor or midwife at time of confinement. The number of midwives was quite sufficient for the needs of the Town. (*See also* paragraph in Appendix II., page 76).

Midwifery
and
Maternity
Services

No change was made in the provision of institutional accommodation for unmarried mothers, illegitimate infants, and homeless children, described on page 18 of the report for 1930.

Institutional
Provision
for Mothers
and
Children

There are eight registered nursing homes in the Borough, of which one is a mixed home for medical, surgical, and maternity patients, two are registered for maternity cases only, one is a home for mothers and babies, and four are registered for aged and infirm persons.

The outstanding event in connection with maternal welfare during the year was the opening, on 4th July, of the Barratt Maternity Home in the grounds of Northampton General Hospital. (*Vide* special paragraph on page 15).

No addition was made to the number of health visitors, which consists of five whole-time and one part-time officers. (*See also* paragraph on "Home Visitation" on page 73).

Health
Visitors

The Maternity and Child Welfare Committee being the authority appointed locally to administer Part I. of the Children Act, 1908, as amended by Part V. of the Children and Young Persons Act, 1932, the health visitors continued to act as infant life protection visitors, visiting children up to nine years of age who are maintained for gain or reward by persons other than relatives. I do not know anybody who could fill the position with more benefit to the children. All the foster-mothers carried out their duties satisfactorily and to the best of their abilities. (Statistics are given on page 79).

Infant Life
Protection

Particulars relating to the provision of specialist orthopædic treatment at Manfield Hospital were given in the report for 1930, page 20. The Medical Officer of Health, in conjunction with the Medical Officers of the School Clinic and Maternity and Child Welfare and Tuberculosis Departments, keeps in close touch with the hospital.

Orthopædic
Treatment

Dr. Bebbington's report on the cases treated under the maternity and child welfare scheme appears on page 74.

Otorrhœa

Cases of otorrhœa (ear discharge) in infants and toddlers are referred to the School Clinic for treatment by arrangement between the Education Authority and the Maternity and Child Welfare Committee. Five cases were carried over from 1935 and thirteen new ones attended; 149 attendances were made. All have cleared up. To expect that all would have done so if they had not been treated at the School Clinic would have shewn undue optimism. It would have been too good to be true. The ages of the children ranged from nine weeks to three and a half years.

Milk for
Mothers and
Children

Much has appeared in the press during the last few months regarding nutrition and the value of milk as a food. The Northampton Maternity and Child Welfare Committee has never been backward in recognising the nutritive value of milk and has made arrangements for the supply of milk free to pregnant and nursing mothers and to children, not only infants but to children up to five years of age, when considered necessary by the Assistant Medical Officer or the health visitors. Proof that there has been nothing parsimonious about this milk supply is shewn by the fact that just over £930 was spent last year on free milk, all of which was pasteurised. (*See also* paragraph on "Milk," page 78).

Voluntary
Workers

Again one has to congratulate the Northampton Maternity and Infant Welfare Voluntary Association on their wonderful record in winning the Astor Shield for the seventh time and being runners-up on four other occasions during the last eleven years—a record which in all probability will never be equalled and one which Lord Astor could not have foreseen when he presented the first shield for competition in 1923. If one was asked why does Northampton always either win the Shield or take second place, the answer would, or should, be "work, and good responsive material to work upon." I take this opportunity of thanking all who have in any way helped to place and keep Northampton in the forefront as regards infant welfare, remembering that the children of today will be the men and women of tomorrow.

See Appendix III. (page 83) for the usual statistical tables in connection with the Medical Officer of Health's report.

Appendix I. (page 55) deals with the work of the Tuberculosis Department and Appendix II. (page 72) with the Maternity and Child Welfare Department.

APPENDIX I.

REPORT OF THE CLINICAL TUBERCULOSIS
OFFICER FOR THE YEAR 1936.

TUBERCULOSIS DISPENSARY,
2, HAZELWOOD ROAD,
NORTHAMPTON.

APRIL, 1937.

*To the Medical Officer of Health and Chief Tuberculosis
Officer.*
SIR,

I beg to submit herewith my report on the anti-tuberculosis
scheme for the year 1936.

Your obedient Servant,
N. B. LAUGHTON.

During the year, 97 cases were notified as suffering from tuberculosis. Of these, 86 were pulmonary and 11 non-pulmonary. The corresponding numbers notified in these two groups in the previous year were 69 and 22 (*i.e.*, a total of 91). The classification of new cases with respect to the site of the disease is given in detail in Table T1 (page 66). Notifications

The disposal of these patients is shewn in Table T7 (page 70), and Table T8 (page 71) gives the age groups for new cases.

The number of deaths and the death-rates from tuberculosis per thousand of the population in 1936 were as follow :— Deaths

	No. of Deaths.	Death- rates.
Respiratory Tuberculosis	54	0·56
Other Forms	8	0·08
Totals	62	0·64

The death-rates for the previous year for pulmonary and other forms of tuberculosis were 0·54 and 0·11 respectively. The total rate of 0·64 for 1936, therefore, shewed improvement by a small margin on the figure of the previous year, though that for pulmonary disease was slightly increased. The total death-rate for England and Wales in 1936 was 0·69 (pulmonary 0·58 and non-pulmonary 0·11).

Under the Public Health (Tuberculosis) Regulations, 1930, the names of twenty-two notified persons were removed from the register in 1936, made up as follows :— Revision of
Register

- (a) Ten in which the diagnosis had not been established, and
- (b) Twelve in which the patient had attained a condition which might be regarded as recovered.

Particulars of cases thought to be suitable for deletion were submitted to the Medical Officer of Health, who obtained the assent of the practitioner notifying or at present in charge, where possible.

On 31st December, 1936, there were 552 cases on the Medical Officer of Health's register, 407 being pulmonary and 145 non-pulmonary.

X-ray Examin- ations

Radiography continues to be of inestimable value in dispensary and hospital work. Since the installation of the X-ray plant early in 1932 this part of the work has increased appreciably year by year. In 1936 screen examinations numbered 404 and 249 photographs were taken, a total of 653 examinations. Investigation by this means is used constantly in the diagnosis of tuberculosis, in its differentiation from other conditions, in assessing the type and extent of tuberculous invasion, in determining the most suitable treatment and observing its results, and in the control of treatment by artificial pneumothorax. It often enables tuberculosis to be detected at the vital stage when clinical signs are still absent, or definitely excludes it, in either case dispensing with a period of observation. The value of its application in the diagnosis of early disease is discussed later on.

Artificial Pneumo- thorax

Administered under careful clinical and X-ray control to suitably selected patients, artificial pneumothorax holds the field as the most valuable form of treatment available for pulmonary tuberculosis. Although limited with respect to the type of case to which it is applicable, it gives results more effective and more permanent than those obtainable by other methods. The treatment is being used whenever indicated and one may confidently say of the patients receiving it that they could not have attained their present state of health and prospects by any other means.

During the past year 21 patients were treated at Welford Road Hospital and the Dispensary. The total number of inductions and refills was 518, a notable increase. The average number of injections per patient was 24·7. The majority are without symptoms and some at work. In two cases the treatment was discontinued.

Dental Treatment

Dental treatment has been carried out at Welford Road Hospital when considered necessary. Conditions such as dental sepsis and pyorrhœa are detrimental to a patient's progress, reducing his capacity to resist the major disease.

Ten patients had extractions carried out by the visiting dentist. In addition, assistance was given towards dental treatment and the supply of dentures in two cases under dispensary supervision, and for treatment of two Borough patients in Papworth Village Settlement.

The provision of extra nourishment is an after-care measure intended to help maintain the condition of patients and prevent the relapse which might follow poor nutrition and a lowered resistance. The tuberculous person suffers from a wasting disease and so needs more than the sustenance sufficient to keep others in good health. During the past year, 64 grants were made of butter, milk and eggs for periods of three months, and 30 patients received this benefit.

Extra
Nourishment

Under the existing scheme men do light work in the Corporation parks for 25 hours a week, and one woman is employed in the Transport Parcels Department. At the beginning of the year three women and thirteen men were so employed. The health of three patients broke down to such an extent that they had to come off the scheme. Four others were off work with illness for varying periods. Three park workers ceased work for other reasons, and three men were taken on. At the end of the year the number employed was twelve men and one woman.

Park
Workers

The great importance of housing as a means of maintaining health and preventing the occurrence of tuberculosis has been stressed in previous reports. The benefits are apt to be overlooked because they are not obvious or recordable in the statistical sense. It may be said with some surety, however, that among the contacts of patients with pulmonary tuberculosis living in council houses, the likelihood of succumbing to the disease is, in the majority of cases, much less than in their previous homes. In December, 1936, the number of tuberculous persons living in Council houses was 128. Further improvement could be effected, however, by collaboration between the Public Health and Housing Committees so as to make the tenancy of Council houses by tuberculous families subject to such co-operation on the part of the latter as would best serve the interests of patients and public. A system of supervision of this kind has been tried elsewhere with success. It need involve no undesirable restrictions on those who are well-intentioned, and would ensure some control over the small but dangerous minority who scorn advice and ignore precautions.

Housing

A deplorable wastage of life and money is constantly occurring through weakness at two points in the campaign against tuberculosis. Active measures have now been adopted

Care Work

to strengthen one of these, namely, the welfare (apart from institutional treatment) of patients and their families. Towards the end of the year steps were taken to form a Care Committee. Its initial activity was the granting of £20 to provide for needy families at Christmas, and 17 households benefited. This is the beginning of a work that, given sufficient impetus and means, is capable of expansion in several important directions. These were broadly outlined in last year's report, and the value of such activity as a preventive measure was indicated. For its proper growth and development are required a clear appreciation of the needs involved, adequate funds and the stimulus of drive to make the work effective. Many care committees have faded out of existence for lack of these essentials.

Early Diagnosis

The other weak point in this and every other anti-tuberculosis scheme is the failure in detection of tuberculous persons in whom the disease is still in an early stage of activity. It is noteworthy that this frustration has continued in spite of the fact that increased experience and improved technique have made early diagnosis considerably more easy and precise than it used to be. The facilities for diagnosis exist, but the large majority of cases come to notice for the first time in the intermediate or advanced stages of disease, having already lost for ever the chance of full restoration of health. With treatment a certain number of these may expect partial restitution, and this is achieved by the expenditure of large sums of money on sanatorium treatment. The patched-up patients eventually return home to compete (if they are fit to attempt this) in the labour market with able-bodied men and women. In many such cases breakdown is inevitable, sooner or later, followed by more incapacity and more costly treatment.

Against this background of tragedy and waste stands clear the fact that, with very rare exceptions, these persons, had they been found early enough and given a comparatively short course of treatment, could have returned home with a soundly restored working capacity. They could have done so with a good prospect of keeping well afterwards, without the stigma of being a source of infection to their associates at home and at work, and free from the humiliation of being a burden on the State.

Young Adult Mortality

There is an important and serious factor entering into the problem. It is true the death-rate in tuberculosis shews a continued decline, but when considered in relation to age, disturbing evidence comes to light. The highest death-rate appears in the 15 to 35 age group, the time when life is economically at its highest value. (In this respect it contrasts with cancer, most evident in later life). The decline in the mortality

at this period has been small compared with that in other years. There has been less improvement among females than among males ; in fact, between the ages of 15 and 25 the death-rate on the women's side for the decade 1921-30 exceeded that for 1901-10. Further, at this time of life the disease as a rule is more active and destructive than in older people, in whom a benign, chronic type is somewhat prevalent.

In addition to those early adult cases there are others more advanced who continue to work (often to within a few weeks of death) for quite long periods before seeking medical advice. They are carriers and disseminators of the disease. It is not uncommon to receive notification of persons with most extensive disease who shew remarkably little constitutional disturbance, and sometimes the physical signs in the chest vary little from the normal. Ignorant of their condition, and fearful of the heavy penalties of unemployment, they pay the supreme penalty of delay.

Always one fact remains. Tuberculosis is a preventable disease. Its devastating effects can be prevented if we discover the lesion in the lung early enough and treat it. But how is it to be discovered ?

The Problem
of Preven-
tion

Routine examination of the population, fit and unfit, is not practicable. The public have not yet sufficiently realised the enormous benefits that would follow such a course as to demand it. One hears much of the right to work. It must be conceded by all that the right to keep well is even more important. It is not appreciated to what extent its application is under personal control and how the privilege is ignored. Daily we see people exercising the right to get ill, the right to infect others. The liberty of the individual in this respect—be it a simple condition of catarrh or a fatal one of tuberculosis—means the victimisation of the mass. The community in general, blind to the fact that a colossal wastage is preventable, practises and condones the everyday offence and pays highly (and almost as a matter of course) for the destruction that ensues.

Not having yet reached that happy state when voluntary examination from a preventive standpoint will be universal, is there no other course than to wait for the tuberculous person to declare himself at whatever stage the disease happens to have reached ?

If the hill will not come to Mahomet, Mahomet will go to the hill. We cannot wholly emulate the prophet, but it seems possible to go so far on the way. Though a systematic, medical review of the population is out of the question there is feasible a modification whereby certain groups of individuals, given sufficient encouragement, could be examined for the ultimate good of all.

In considering the proposition that follows it must be realised that the early, recoverable stage at which active

tuberculosis first asserts itself, is heralded by little or nothing in the way of symptoms, and clinical signs are not discernible by the stethoscope. The first advance of the disease is recognisable, however, by X-ray examination.

A Proposition

Local conditions seem particularly favourable to the carrying out of a scheme that would be, to say the least of it, a valuable investigation, and should promise to be much more. It is one that would have strong backing from responsible medical opinion, though it has not yet been carried out (as far as I am aware) on any large scale in this country. This is the periodic X-ray examination of factory workers, especially in the critical age period of 15 to 25 years. The preponderance of one industry in the Borough would be helpful to the co-operation needed in the examination of numbers large enough to make such a scheme effective. Another favourable feature is the comparatively small flux of the population to and from this area. The project would entail the establishment of an X-ray clinic in charge of a medical radiologist. Radiographic screening of the chest (actually a matter of a minute or two for each person) need not, under suitable arrangements, entail more than a brief absence from the factory, for the routine is simple and rapid. Cases in which suspicion, or evidence, of tuberculosis was found, could be referred to the Tuberculosis Dispensary for investigation. It is certain (as experience at every dispensary testifies) that other abnormal conditions of the chest would come to light, and these could be referred to the patient's doctor where treatment was indicated. The cost of such a scheme would go little beyond the capital outlay on premises and plant and the maintenance of staff. The expense of radiographic screening is negligible, and in a few instances only would films be required.

The advantages resulting from a scheme of this kind may be summarised :—

- (1) It would go to the root of the tuberculosis problem, the detection and treatment of disease at an early and recoverable stage.
- (2) It would forestall the infection of persons by ambulant cases with unsuspected and active disease.
- (3) Although primarily for the detection of active tuberculosis it would assist in the discovery of other disabilities (*e.g.*, heart conditions and cancer).
- (4) By stimulating public interest in the prevention of disease, and particularly in the need for the early recognition of pulmonary tuberculosis, it would play an important part in health education.
- (5) It would counter the production of the chronic type of case now preponderating as the result of late diagnosis.
- (6) A financial saving would result from the effective

treatment of early cases, the decreasing proportion of the more advanced and from reduction in the opportunities for mass infection.

From the economic standpoint immediate results could not be expected. But there seems every reason to believe that a scheme of this kind, worked over a period of years, would definitely manifest itself in a reduction of that vast sum spent yearly in maintaining in sanatoria patients that should never have been what they are, young men and women doomed to chronic ill-health, discouraged by a sense of their uselessness in the labour market and in the social world, haunted by the fear of relapse.

What benefits the individual benefits the larger unit, the factory, the community. A strong co-operative effort by the general public, employers and the health services could be made, in the manner indicated above, in attacking the prime cause of the continued ravages of tuberculosis among us.

The function of the Dispensary as a diagnostic centre is not always recognised. It is too commonly believed that patients are sent there for the confirmation of a diagnosis of tuberculosis, whereas more frequently it is to exclude this serious condition. Last year the verdict in favour of active tuberculosis occurred in only 25 per cent. of those persons sent for investigation. The title of the clinic doubtless helps to give this impression and make patients reluctant to take advantage of its facilities as they might.

Tuberculosis
Dispensary

Both at the Dispensary and at Welford Road Hospital the work continues to increase. This is due for the most part to an increase in radiography and in treatment by artificial pneumothorax, the extent of which is indicated in the sub-joined table. Both are likely to develop further.

	1932	1933	1934	1935	1936
X-ray examinations	418	500	539	626	653
Artificial pneumothorax	23	74	202	373	518

Pneumothorax work at the Dispensary now occupies two half-days a week, a heavy encroachment on other work. The attendances of patients at the Dispensary for the purpose of supervision, and also domiciliary visiting by both Tuberculosis Officer and Nurse, have been reduced as far as possible to enable more important duties to be dealt with. Time, however, does not permit of the carrying out of a considerable amount of useful work that might be done at both the Dispensary and Hospital. One variable figure which shewed a notable (43 per cent.) increase on that of the previous year was the number of patients sent for the purpose of diagnosis by general practitioners. This is welcome in that it indicates increased use of the Dispensary for the diagnosis of cases in which clinical evidence of disease is not yet manifest.

A summary of other work at the Dispensary is given below :—

Attendances :—

Total number 1,491

Patients attending :—

Males 293

Females 245

538

Average number of attendances per patient 2·8.

Contacts :—

Total number of examinations 116

Individuals examined 83

Of these, 1 was subsequently notified.

Examinations for diagnosis at request of general practitioners :—

Total number of examinations 183

Individuals examined 129

32 of these were found to have active tuberculosis.

Visits by Tuberculosis Officer to patients and their homes 241

TUBERCULOSIS HEALTH VISITOR. Visits made by the Tuberculosis Nurse were as follow :—

Investigations in cases of :—

Pulmonary tuberculosis 79

Other forms 10

Deaths 3

92

Re-visits and other investigations 840

Total 932

In addition to these investigations, the Tuberculosis Nurse attended at all Dispensary clinics and assisted in special treatment (*e.g.*, artificial pneumothorax) carried out there.

LABORATORY EXAMINATIONS. The results of laboratory examinations carried out at the Dispensary (including those of specimens from Welford Road Hospital) are given below :—

Cases investigated 464

Results of bacteriological examinations for tubercle bacilli in sputum, urine, etc. :—

Positive 170

Negative 439

609

Welford
Road
Hospital

Full use was made of the accommodation at Welford Road Hospital during the past year. More patients received treatment and the average number of occupied beds was 31. This represents full capacity, as 6 of the 32 beds are in huts that are not used throughout the whole winter. It is encouraging to find that much greater use is now made of the hospital than

formerly, as is shewn by comparison of the average number of beds occupied during the past five years (30) with that of the preceding five (16).

Treatment is based on the fundamental principles of physical and mental rest carried out under healthy, open-air conditions with an ample and nutritious diet. Of subsidiary methods the most valuable is artificial pneumothorax (*see* page 56). Gold therapy has also been employed but the results have been rather disappointing. Experience has shewn that, with very few exceptions, a period of prolonged rest at the commencement of treatment is essential as a basis for good recovery, whether or not any therapeutic measure of a special kind is adopted.

Particular attention is paid to the educative aspect of treatment, and everything is done to stimulate the patients' own interest in their recovery and to prepare them for the difficult task of maintaining their health afterwards. They receive individual instruction to this end, and lectures are given once a month.

The mental attitude of patients to the disease and to the circumstances resulting from it is a factor that often seriously influences recovery and requires re-orientation at an early stage of treatment. Ill-effects are apt to follow discouragement and introspection, and means to counter these are of definite curative value. The provision of more entertainment and the introduction of handicraft work last year were both very helpful in this direction. Brightening of the immediate surroundings has been effected by repainting and decoration of the recreation hut and of the patients' shelters, and also by continued improvement in the grounds themselves. The replacement of the high fence on one side of the hospital by a laurel hedge has removed an element that contributed to a sense of confinement. The grounds have been enhanced by more extent of lawn, the addition of decorative trees and shrubs and more flower beds. On the productive side, a substantial addition has been made to the stock of fruit trees.

There is nevertheless one side of the hospital in which no improvement has been made and where it is greatly needed. As pointed out in previous reports the accommodation for nursing staff and domestics is quite inadequate, having little in the way of modern comfort or privacy.

A summary is given below of particulars respecting the treatment of patients at Welford Road Hospital:—

	Males.	Females.	Total.
Remaining at end of 1935 ..	14	12	26
Admitted	37	25	62
Treated	51	37	88
Discharged	31	19	50
Died	6	4	10
Remaining at end of 1936 ..	14	14	28

Of the 62 cases admitted, 43 were insured persons.

Condition on discharge :—

Quiescent	13
Much improved	19
Improved	10
No material improvement	7
Declining	1

Of the patients discharged, 42 (84 per cent.) were quiescent or improved.

Other data :—

Average number of beds occupied	31.1
Average number of days in hospital	202
	(approximately 7 months)

Average gain in weight 15½ lbs.
(3 patients were not weighed and 2 lost weight).

Ages of patients 17 to 64 years

Results of sputum examination :—

Admitted with positive sputum	36
Positive sputum cases without tubercle bacilli on discharge, or without any sputum	19
	(53 per cent.)

Dental treatment :—

Patients treated	10
Extractions and fillings	26

Creaton
Sanatorium

Below are the data with reference to the patients treated at Creaton Sanatorium in 1936 :—

	Males.	Females.	Total.
Remaining at end of 1935 ..	17	5	22
Admitted	11	8	19
Treated	28	13	41
Discharged	18	6	24
Remaining at end of 1936 ..	10	7	17

Condition on discharge :—

Quiescent	7
Much improved	8
Improved	5
No material improvement	2
Worse	2

Manfield
Orthopædic
Hospital

Particulars of cases treated at Manfield Orthopædic Hospital and Shipman Convalescent Home are as follow :—

	Males.	Females.	Total.
Remaining at end of 1935 ..	10	5	15
Admitted	4	2	6
Treated	14	7	21
Discharged	6	3	9
Remaining at end of 1936 ..	8	4	12

In all those discharged the condition was quiescent.

Two patients were maintained at Papworth Village Settlement. Others went privately elsewhere as follows:— one to Brompton Hospital, London; one to Brompton Hospital Sanatorium, Frimley; and one to Killingbeck Sanatorium, Leeds.

Other
Institutions

There was no case of compulsory removal to hospital under Section 62 of this Act.

Public
Health Act,
1925

It was not necessary to take any action under these Regulations, which deal with tuberculous employees in the milk trade.

Public
Health (Pre-
vention of
Tuberculosis)
Regulations,
1925

TABLE T1. NORTHAMPTON, 1936.

TUBERCULOSIS. CLASSIFICATION OF NEW CASES.

CLASSIFICATION.	NOTIFIED CASES.			DEATHS OF CASES NOT NOTIFIED.		
	M.	F.	TOTAL.	M.	F.	TOTAL.
Pulmonary :—						
Lung and Pleura	44	42	86	3	1	4
Larynx	—	—	—	—	—	—
	44	42	86*	3	1	4*
Meninges and Brain	3	—	3	—	—	—
Peritoneum and Intestines	1	—	1	—	—	—
Bones and Joints	3	3	6	—	—	—
Cervical Glands	1	—	1	—	—	—
Other Organs	—	—	—	1	—	1
Totals	52	45	97	4	1	5

*A total of 90 fresh cases of pulmonary tuberculosis.

TABLE T2. NORTHAMPTON, 1936.

PULMONARY TUBERCULOSIS INVESTIGATIONS. DURATION OF ILLNESS.

PERIOD.	NOTIFIED CASES.	DEATHS OF CASES NOT NOTIFIED.	TOTAL.
Under 6 months	20	—	20
Over 6 months and under 1 year	19	—	19
Over 1 year and under 2 years	12	—	12
Over 2 years and under 3 years	9	—	9
Over 3 years and under 4 years	7	1	8
Over 4 years and under 5 years	4	—	4
Over 5 years	10	1	11
Unascertained	5	2	7
Totals	86	4	90

TABLE T3. NORTHAMPTON, 1936.

PULMONARY TUBERCULOSIS INVESTIGATIONS. SEX AND STATE.

	MALES.	FEMALES.	TOTAL.
Single	23	19	42
Married	22	21	43
Widowed	1	3	4
Unascertained	1	—	1
Totals	47	43	90

TABLE T4. NORTHAMPTON, 1936.

PULMONARY TUBERCULOSIS INVESTIGATIONS. DEGREE OF HOME
ISOLATION FOUND.

	MALES.	FEMALES.	TOTAL.
Number having separate Bedrooms	17	13	30
Number having separate Beds (only)	3	5	8
Number having no Isolation	16	17	33
Number in Institutions	6	2	8
Unascertained	5	6	11
Totals	47	43	90

TABLE T5. NORTHAMPTON, 1936.

TUBERCULOSIS DEATHS. PERIOD ELAPSING BETWEEN NOTIFICATION
AND DEATH.

PERIOD BETWEEN NOTIFICATION AND DEATH.	MALES.	FEMALES.	TOTAL.
(1) PULMONARY TUBERCULOSIS :—			
Not notified	2	1	3
One month	4	2	6
1—6 months	2	3	5
6—12 months	6	1	7
12—18 months	2	1	3
18—24 months	3	—	3
2—3 years	5	6	11
3—4 years	3	1	4
4—5 years	2	1	3
5 years and over	4	5	9
Totals	33	21	54
(2) TUBERCULOSIS OTHER THAN PULMONARY : —			
Not notified	2	—	2
One month	3	—	3
3—4 years	—	1	1
4—5 years	—	1	1
5 years and over	—	1	1
Totals	5	3	8

See footnote to Table T8.

TABLE T6. NORTHAMPTON, 1936.

PULMONARY TUBERCULOSIS. OCCUPATIONAL INCIDENCE AND MORTALITY.

OCCUPATION.	New Cases.	Deaths Registered	OCCUPATION.	New Cases.	Deaths Registered
Shoe Operatives :—			Foundry Hand	1	—
(a) Clicker	2	5	Fruit-drink Maker ..	1	—
(b) Laster	5	3	Hotel Porter	1	—
(c) Finisher	4	5	Housekeeper	—	1
(d) Roughstuff and Pressman	3	2	Housewife	17	8
(e) Warehouse and General	3	3	Insurance Inspector	—	1
(f) Female Worker	12	3	Labourer	3	2
	29	21	Laundry Proprietor	—	1
Barman	—	1	Leather Cutter	1	—
Blouse Machinist ..	1	—	Leather Dresser	2	—
Box Maker	1	—	Leather Factor	—	1
Cabinet Maker	—	1	Painter	—	1
Cake Maker	1	—	Parachute Instructor	1	—
Carpenter	—	1	Postman	1	—
Celluloid Moulder ..	1	—	Printer	1	—
Civil Servant	1	—	Salesman	2	—
Clerk	5	2	Shop Assistant	2	—
Coal Carter	—	1	Shop Manager	1	1
Collector	1	—	Trained Nurse	1	1
Commission Agent ..	1	—	Transport Messenger	—	2
Confectioner's Packer	—	1	Traveller	1	—
Currier	1	—	Wheelwright	1	1
Domestic Servant ..	1	—	Wood Chopper	1	—
Dressmaker	1	—	No Occupation	3	5
Electrician	1	—	Not Ascertained ..	1	—
Engineer	2	1			
Errand Boy	1	—	Totals ..	90	54

TABLE T7. NORTHAMPTON, 1936.

PULMONARY TUBERCULOSIS.

DISPOSAL OF NOTIFIED CASES.

CLASSIFICATION.	NUMBER.	PER CENT.
Received Residential Treatment at :—		
Creaton Sanatorium .....16	} 67	78·0
Welford Road Hospital .....45		
Northampton General Hospital 3		
Brompton Hospital 1		
Brompton Hospital Sanatorium 1		
Private Nursing Home 1		
Residential Treatment not considered necessary..	11	12·7
Refused Residential Treatment	6	7·0
Too ill for removal	2	2·3
Totals	86	100·0

TABLE T8. NORTHAMPTON, 1936.

TUBERCULOSIS. AGE GROUPS FOR NEW CASES AND DEATHS.

AGE PERIODS.	NEW CASES.				DEATHS.			
	PULMONARY.		NON-PULMONARY.		PULMONARY.		NON-PULMONARY.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	—	—	—	—	—	—	—	—
1-5 years	—	—	1	—	—	—	—	—
5-10 years ..	—	—	1	—	—	—	—	—
10-15 years ..	—	1	2	—	—	—	—	—
15-20 years ..	3	4	2	1	1	—	2	1
20-25 years ..	11	7	—	—	8	3	1	—
25-35 years ..	14	13	2	1	6	6	2	—
35-45 years ..	10	13	1	1	3	6	—	—
45-55 years ..	6	1	—	—	7	3	—	1
55-65 years ..	2	3	—	—	6	3	—	1
65 and upwards	1	1	—	—	2	—	—	—
Totals	47	43	9	3	33	21	5	3

Three (5·6 per cent.) of the fifty-four deaths from tuberculosis of the respiratory system and two (25·0 per cent.) of the eight deaths from other forms of tuberculosis were of cases not notified. Reference should also be made to Table T5.

See also remarks of Medical Officer of Health on pages 50 and 51

APPENDIX II.

REPORT OF THE ASSISTANT MEDICAL OFFICER FOR
MATERNITY AND CHILD WELFARE FOR THE YEAR 1936.

To the Medical Officer of Health.

SIR,

I beg to submit herewith my report on the maternity and child welfare work in the Borough for the year 1936.

Your obedient Servant,

E. F. BEBBINGTON.

INFANT WELFARE CENTRE,
DYCHURCH LANE, NORTHAMPTON.
APRIL, 1937.

Infant
Mortality

Although the birth-rate for 1936 was higher than that of 1935 the number of infant deaths was lower, viz:—forty-eight, ten fewer than in 1935. The infant mortality-rate was 39·9 per thousand live births registered, which it will be seen from Table M1 (page 80) is well below the current rate of 59 for England and Wales. It is the lowest rate on record for the Borough.

Premature birth again accounted for the greatest number of infant deaths; twenty infants died owing to prematurity, compared with eighteen in 1935.

The infant deaths are classified by cause in Table M2 (page 80) and in more detail according to cause and age in Table D at the end of this volume.

Notification
of Births

The birth-rate for 1936 was 12·5, compared with 11·9 for 1935.

1,204 live births and forty-six stillbirths were registered. 1,426 live births and fifty-seven stillbirths were notified, making a total of 1,483 (*see* Table M3, page 80). Table M4 shews the sources of notification.

1,218 births were investigated by the health visitors; twenty-two of these were non-notified. They also visited ten other births but no information was available. The remaining births occurred either in larger houses, or the mothers, resident outside the Borough, came into the Town for their confinements and returned home later.

Investigation disclosed that seventy-two babies were born prematurely, six less than in 1935.

The number of stillbirths notified was fifty-seven, one more than last year. Sixteen of the fifty-seven were County cases, born and notified in the Borough. Stillbirths

Forty-one stillbirths were investigated by the health visitors, who also visited three which were non-notified. Stillbirths in 1936 were slightly more prevalent amongst primiparæ. Five of the forty-four stillbirths were due to twin pregnancy. Three of these five twin pregnancies were in primiparæ. Nineteen stillbirths were premature births—a common cause of stillbirth. Four of the forty-four were illegitimate, also a common cause of stillbirth.

Visits to Expectant Mothers :—		Home Visitation
First Visits	215	
Total Visits	470	
Visits to Children under One Year of Age :—		
First Visits	1,228	
Total Visits	5,251	
Visits to Children from One to Five Years of Age :—		
Total Visits	7,944	

The health visitors paid 14,649 visits in 1936. This number includes all the visits enumerated above and also extra visits, viz :—to houses where a stillbirth had occurred or a baby under one year had died, and to all cases of puerperal fever, puerperal pyrexia, ophthalmia neonatorum, pneumonia, etc., in women and children.

A new ultra-violet ray lamp (Hanovia “ Alpine Sun ”) was bought as part of the equipment for the new centre in St. Giles’ Street. This has been in use since 12th November, 1936, and is proving extremely satisfactory. Ultra-
violet Ray
Treatment

Treatment was continued with the usual exception of the summer months and a period when the new centre was being built (the beginning of October to the middle of November). Children under five years of age, contrary to adults or school children, can make full use in summer of natural sunlight, which is to be preferred, in most instances, to artificial light treatment. Nineteen children were on the books at the beginning of 1936 and twenty-eight new cases were admitted to the clinic during the year, the total attendances being 561. The children were chiefly suffering from rickets and marasmus and most of them benefited from the treatment. Thirty-four ceased treatment during the year and thirteen were still under treatment at the end of December.

Manfield
Orthopædic
Hospital

Four beds are maintained, when occupied, at Manfield Hospital, as described on pages 67 and 68 of the 1931 report. At the beginning of January five patients were under treatment at the hospital and one at the John Greenwood Shipman Convalescent Home. During the year two were admitted to the hospital suffering from general orthopædic conditions. One patient was taken over by the Education Committee from the 1st November as he was five years of age, four were discharged, the average length of stay being 349 days, and three cases were still under treatment at the close of the year.

New
Centre

The Maternity and Child Welfare Committee built and equipped a new maternity and child welfare centre in St. Giles' Street, Northampton, during 1936. Architecturally the new building was modelled on one of the new Birmingham centres, which a sub-committee inspected before deciding to build. The new centre in Northampton was built as headquarters for maternity and child welfare work. Ante-natal clinics, ultra-violet ray clinics, toddlers' clinics, and infant welfare sessions are held there on selected dates throughout the year. The centre is fully equipped with up-to-date fittings, including a new "Alpine Sun" Hanovia lamp for ultra-violet ray treatments and a specially insulated toddlers' play-room to ensure quiet during consultation sessions. The ceiling of the hall is also constructed of sound-proof material to lessen noise. This hall can be darkened, if necessary, for lantern lectures.

In addition to consulting room, nurses' room (ultra-violet ray room), weighing room (which contains a special weighing table modelled on the Woolwich plan), and toddlers' room, there is a well equipped class-room for cookery and dressmaking lessons, a small kitchen and sales-room, and an office fitted with built-in cupboards for filing records, etc.

The whole plan of the centre has been designed to give efficiency to the work whilst not omitting bright and cheerful colours such as would appeal to small children.

The Maternity and Child Welfare Committee is to be congratulated on its appreciation, after the initial visit of investigation in Birmingham, of the fact that work amongst mothers and children is greatly facilitated by adequate premises and cheerful surroundings.

Statistics

There was a decrease in the number of children under one year of age who attended at the centres for the first time. There was also a decrease in their total number of attendances but an increase in the attendances of children from one to five years of age. Table M5 (page 81) gives the average attendances and consultations at the nine centres in the Town. The total average attendance of mothers per week was 505, against 502 in 1935; of babies and toddlers 577, against 576 in 1935.

The number of consultations per fortnightly session was 187, against 186 in 1935.

The number of attendances at all centres during the year was as follows :—

(a) By Children under One Year of Age	10,533
(b) By Children between the Ages of One and Five Years	14,853

The attendance of children per session at all centres during 1936 averaged 64. In 1935 the figure was also 64.

The number of children who attended at the centres for the first time during the year was :—

(a) Children under One Year of Age	536*
(b) Children between the Ages of One and Five Years	121

(*The figure 536 represents a percentage of 37·6 of the notified live births).

The number of children who were in attendance at the centres at the end of the year was :—

(a) Children under One Year of Age	452
(b) Children between the Ages of One and Five Years	1,208

The new centre was opened on 29th October by Mrs. John Woods, chairman of the Northampton Maternity and Infant Welfare Voluntary Association. The ladies of this Association have continued their excellent social work during the year in the nine infant welfare centres. They again report a successful year's work. For the seventh time in eleven years Northampton has won the Astor Shield in open competition with other large towns, taking second place on the other four occasions.

Voluntary
Work

The nine infant welfare centres have been well attended and valuable educational and social work has been carried on among the mothers. "Baby Week" was held in October when each of the centres had an open day and an exhibition emphasising some aspect of infant welfare. Public lectures have been given by Dr. E. D. T. Hayes on "Child Management," by Dr. Lilian M. Blake on "Problems of the Toddler," and at the Annual Meeting by Dr. Ethel Cassie on "The Growth of Infant Welfare Work."

The chief development of the voluntary work has been the formation of a "Fathers' Council" which, starting in December, under the leadership of Mr. F. C. Whiting and Mr. W. H. Fox, with a membership of thirty and fortnightly meetings, has now over eighty members and meets three times a month. Lectures have been given by Mr. F. A. Husbans, Dr. J. M. Mackintosh and others; but the chief value of the Fathers' Council lies in bringing the "other parent" in the home into direct contact with infant welfare and thus filling one of the remaining gaps in the welfare services.

Toddlers' Clinic

The clinic organised specially for toddlers (one to five years of age) is held on two Tuesdays in each month. Attendances at this clinic are included in the figures under the (b) headings in the paragraphs under the heading "statistics." Cases are referred to this clinic only by doctors and health visitors. Debilitated and under-nourished children attending are granted free milk, in accordance with the scale in operation for the Borough, on medical grounds only.

Dr. Emily H. Shaw is the Medical Officer for the toddlers' clinic. She also conducts a toddlers' session once a month at Abington Avenue centre in addition to the ordinary sessions held there every Thursday. A part-time health visitor assists her at all the toddlers' clinic sessions in addition to one of the full-time health visitors.

Seventy-seven new cases were seen at the clinic during the year and the total attendances made were 607.

Midwives

Twenty-eight midwives notified their intention to practise. The Queen's Institute of District Nursing employed ten of these at different times and three were attached to St. Edmund's Hospital. The Inspector of Midwives paid thirty-four visits to midwives practising independently for the purposes of inspection. She also paid two visits of inspection to the Queen's Institute of District Nursing. Medical aid was summoned by a midwife under Section 14 (1) of the Midwives Act, 1918, in 225 cases.

The Queen's Nurses attended 496 cases (as maternity nurses or midwives) in 1936.

Maternity Homes

There are eight nursing homes in the Town, three of which may admit maternity cases only. One (St. Matthew's Nursing Home) is registered for maternity, medical, and surgical cases. Forty-two visits of inspection were paid to the nursing homes by the Assistant Medical Officer.

The Local Authority maintains no maternity home. An arrangement is in operation whereby expectant mothers, who are found to require institutional treatment at the time of confinement, are treated in the General Hospital (Barratt Maternity Home). Seventeen cases were admitted in 1936.

Ante-natal Work

The Council provides and maintains one ante-natal clinic (two sessions per week) at the New Centre, St. Giles' Street. In addition, an ante-natal clinic is held fortnightly, with an extra session once a month, at the Queen's Institute of District Nursing.

Sixty-nine sessions were held at the Central Building and eleven at the New Centre, St. Giles' Street. These were attended by 210 expectant mothers (including forty-two still attending from 1935), making 499 attendances altogether ;

each patient thus averaged 2·4 attendances. The percentage of total notified births (live and still) which the figure 210 represents is 14·2. This figure is lower than in reality, as, though County births occurring in the General Hospital and nursing homes are included in the total notified births, County women are excluded from the Borough clinic.

At the Queen's Institute of District Nursing, 323 attendances were made by 323 expectant mothers in thirty-nine sessions. The 323 mothers represent 21·8 per cent. of the total notified births.

The percentage of total notified births represented by cases attending all ante-natal clinics is 36·0, but if County births are excluded the percentage is raised to 42·0. This figure is somewhat higher than in 1935, when it was 41·8.

165 patients who attended the Borough clinic (1935-1936) had babies born in 1936. The corresponding number for 1935 was 200. Eight births were not traceable as the patients had removed to other districts. These births include three stillbirths and five deaths of infants under one month, *see* tables below :—

CAUSES OF STILLBIRTH—MATERNAL AND FŒTAL :—

(a) Prolapse of Cord	1
(b) Malpresentation	1
(c) Chorea (maternal)	1
	—
	3
	—

CAUSES OF DEATH—MATERNAL AND FŒTAL :—

(a) Prematurity	2
(b) Congenital Debility	1
(c) Congenital Syphilis	1
(d) Convulsions	1
	—
	5
	—

Fewer patients had babies born in 1936 (*vide supra*). The stillbirth-rate is lower than in 1935, when five pregnancies ended in stillbirths. The neo-natal death-rate is very low (twelve deaths in 1935, five deaths in 1936). There was no maternal death amongst mothers attending this clinic in 1936.

Doctors and midwives generally send their patients to the ante-natal clinic by appointment and in each case a report is forwarded to the doctor or midwife concerned.

Cases in which operative measures may be thought necessary are seen by a consultant by appointment and in emergency. Six cases under this category were dealt with during 1936.

Pregnant women and post-natal cases were seen and advised at the welfare centres during the year. There is no Borough post-natal clinic, but post-natal cases were seen at the ante-natal clinics during the ante-natal session.

A post-natal clinic is held once a month, on a Wednesday afternoon, at the Queen's Institute of District Nursing. There were sixteen sessions during 1936 and ninety-five women attended, making one attendance each. Thus the average attendance per session was 5.9.

Doctors' Bills

The Maternity and Child Welfare Committee undertakes the payment of doctors' and midwives' bills in accordance with a scale adopted in October, 1935. The outstanding debts in connection with these bills are collected by a member of the staff of the Housing Department.

Dental Treatment

As in previous years, children under school age and pregnant and nursing mothers may be treated by the School Dental Officer. Two evenings each week are set apart for this. Payment for treatment is made to the Dental Clinic direct, or later by instalments at the Central Building or at the welfare centres. Since January, 1936, children under school age may be treated at the same rate as school children.

Bills amounting to about £44 were sent to twenty-one patients. Nearly £50 was collected on these accounts and those outstanding from previous years. Over £10 was collected in small fees for which no bills were issued. Table M6 (page 82) shews the numbers dealt with and the forms of treatment.

Milk

Applications for free milk are considered each week by the Milk Sub-Committee. Milk is granted to pregnant and nursing mothers and to children under one year of age, and in special cases to children aged one to five years, for two months on medical and economic grounds. The health visitors have also been permitted to give milk application forms, under the above conditions, to cases requiring milk, in their opinion, on medical and economic grounds. 1,792 applications were considered by the Committee, of which 1,677 were granted and 115 refused. 102,208 pints of pasteurised milk were supplied under contract with local firms at a cost of nearly £931.

"Cow and Gate" dried milk is sold at cost price at the Central Building. 4,381 pounds were sold to 189 separate customers. The cost of this was over £310, all of which was paid at the time of purchase.

Puerperal Fever and Pyrexia

Five cases of puerperal fever occurred. These five include two cases not notified in other areas. Four were treated at the General Hospital and one at home. All five cases recovered.

Twenty-three cases of puerperal pyrexia, including ten non-residents, were notified. Nineteen were treated at the General Hospital and four at home. Three died at the General Hospital from puerperal septicæmia, sepsis, and septic abortion. One of the deaths (viz:—the patient who died of septicæmia)

is not included in the Borough returns as the patient resided in the County.

Four maternal deaths occurred in 1936 (compared with five in 1935). Three were from puerperal sepsis and one from other puerperal causes. Each was investigated by the Assistant Medical Officer and a report forwarded to the Medical Officer of Health for transmission to the Ministry of Health.

Maternal
Deaths

Seven cases of ophthalmia were notified. Five were midwives' cases and one was a doctor's case. The remaining one occurred in an institution. Five were treated at home and two in the General Hospital. Swabs were taken in three cases; one only, the institution case, was said to be positive to Neisser's organism.

Ophthalmia
Neonatorum

In one case the discharge commenced on the second day, two on the fifth, two on the seventh, and two on the thirteenth day. In three cases only was there a history of vaginal discharge in the mother of the child. Vision was not impaired in any of these cases. (*See Table M7, page 82*).

Two babies under the age of two years died from diarrhoea and enteritis (one before reaching the age of one year). The corresponding figure for 1935 was three. The rate was 1·7 per thousand live births registered, compared with 5·9 for England and Wales.

Diarrhoea
and
Enteritis

The Maternity and Child Welfare Department administers Part I. of the Children Act, 1908, as amended by the Children and Young Persons Act, 1932, relating to foster-children. These children are now supervised until they reach the age of nine years. The number of persons receiving children for reward on the register at the end of the year was forty-six; these had charge of fifty-nine children. It was not necessary to obtain any legal order or take any proceedings under the Acts during 1936.

Infant Life
Protection

TABLE M1. ENGLAND AND WALES AND NORTHAMPTON, 1927-1936.
INFANT MORTALITY IN EACH YEAR OF THE DECENNIUM.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
England and Wales	70	65	74	60	66	65	64	59	57	59
Northampton	60.9	53.5	52.8	56.4	70.6	64.3	45.1	45.8	50.2	39.9

TABLE M2. NORTHAMPTON, 1932-1936.
INFANT MORTALITY. CAUSES OF DEATH*.

CAUSES OF DEATH.	1932	1933	1934	1935	1936
Atrophy, Debility, and Marasmus	2	11	4	2	1
Bronchitis and Pneumonia	22	11	5	11	8
Congenital Malformations	5	5	3	7	5
Convulsions	3	1	1	3	2
Diarrhoea, Enteritis, and Gastritis	2	4	7	2	1
Measles	—	—	3	—	1
Premature Birth	23	10	19	18	20
Tuberculous Diseases	1	—	1	1	—
Whooping Cough	4	2	—	2	—
All Other Causes	18	8	11	12	10
TOTAL DEATHS	80	52	54	58	48
TOTAL LIVE BIRTHS	1244	1152	1180	1155	1204
INFANT MORTALITY	64.3	45.1	45.8	50.2	39.9

*See also Table D at end of Report.

TABLE M3. NORTHAMPTON, 1936.
LIVE BIRTHS AND STILLBIRTHS REGISTERED AND NOTIFIED.

	MALES.	FEMALES.	TOTAL.
Number of Live Births Registered	592	612	1204
Number of Stillbirths Registered	22	24	46
Total Number of Births Notified	739	744	1483
Number of Live Births Notified	714	712	1426
Number of Stillbirths Notified	25	32	57

TABLE M4. NORTHAMPTON, 1936.
NOTIFICATION OF BIRTHS. SOURCES OF NOTIFICATION.

	NUMBER.	PER CENT.
Medical Practitioners	380*	25.6
Certified Midwives	1072	72.3
Parents and Others	31	2.1
Totals	1483	100.0

*Includes 163 also notified by Midwives.

TABLE M5. NORTHAMPTON, 1936.
MATERNITY AND INFANT WELFARE CENTRES. STATISTICS.

CENTRE.	DAY OF MEETING (2.30 TO 4.30 P.M.).	AVERAGE ATTENDANCE PER WEEK.				Average Number consulting Doctor per Fortnight- ly Session.
		Mothers (incl. Expectant Mothers).	Babies.	Toddlers.	Total Babies and Toddlers.	
Abington Avenue ..	Thursdays ..	70	25	52	77	21
Broadmead	Mondays ..	75	43	47	90	21
*Central Building ..	Wednesdays	54	19	46	65	20
*Central Building ..	Thursdays ..	43	21	29	50	21
Doddridge Memorial	Tuesdays	60	28	39	67	21
Far Cotton	Fridays	52	32	29	61	21
Kingsthorpe	Tuesdays	46	23	29	52	21
St. Edmund's	Fridays	58	26	37	63	21
St. Sepulchre's	Wednesdays	47	29	23	52	20
	Totals	505	246	331	577	187

A Toddlers' Clinic was also held (*see* page 76).

*Transferred to St. Giles' Street on 4th and 5th November.

TABLE M6. NORTHAMPTON, 1936.

SUMMARY OF DENTAL OPERATIONS.

NATURE OF OPERATION, ETC.	MOTHERS.	CHILDREN	TOTALS.
Number seen	50	190	240
Number treated	39	183	222
Number of attendances	210	407	617
Number of teeth extracted	89	555	644
Number of administrations of local anæsthetic	38	281	319
Number of fillings	34	6*	40
Number of linings	20	—	20
Number of teeth treated with nitrate of silver	1	648	649
Number of dressings	28	4	32
Number of scalings and cleansings	5	4	9
Number of artificial plates	14	—	14
Number of plate repairs	6	—	6
Number of teeth on plates and repairs	170	—	170
Number of other operations	15	7	22
Number completed	21	96	117
Number partly completed, continued to 1937	14	4	18

*Temporary teeth.

TABLE M7. NORTHAMPTON, 1936.

OPHTHALMIA NEONATORUM. ANALYSIS OF CASES NOTIFIED, WITH
ULTIMATE RESULT.

CASES NOTIFIED.	TREATED.		ULTIMATE RESULT.			
	AT HOME.	IN HOSPITAL.	VISION UN- IMPAIRED.	VISION IMPAIRED.	TOTAL BLINDNESS.	DIED.
7	5	2	7	—	—	—

See also Section VII. of Medical Officer of Health's Report (pages 52 to 54).

APPENDIX III.

STATISTICAL TABLES.

TABLE 1. NORTHAMPTON, 1927-1936.

NATURAL INCREASE OR DECREASE OF POPULATION IN EACH YEAR OF THE DECENNium.

YEAR.	POPULATION.*	LIVE BIRTHS.	DEATHS.	NATURAL INCREASE (+) OR DECREASE (-).	INCREASE (+) OR DECREASE (-) PER 1,000.
1927	93260	1281	1124	+157	+1.68
1928	94270	1308	1060	+248	+2.63
1929	94180	1249	1093	+156	+1.66
1930	93460	1224	1072	+152	+1.63
1931	92970	1233	1091	+142	+1.53
1932	96730	1244	1108	+136	+1.41
1933	96630	1152	1091	+61	+0.63
1934	96550	1180	1096	+84	+0.87
1935	96700	1155	1051	+104	+1.08
1936	96300	1204	1209	— 5	—0.05

*Resident population at mid-year estimated by Registrar-General.

TABLE 2. ENGLAND AND WALES AND NORTHAMPTON, 1927-1936.

BIRTH-RATES IN EACH YEAR OF THE DECENNium.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
England and Wales	16.7	16.7	16.3	16.3	15.8	15.3	14.4	14.8	14.7	14.8
Northampton	13.7	13.9	13.3	13.1	13.3	13.0	11.9	12.2	11.9	12.5

TABLE 3. ENGLAND AND WALES AND NORTHAMPTON, 1927-1936.

DEATH-RATES IN EACH YEAR OF THE DECENNium.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
England and Wales	12.3	11.7	13.4	11.4	12.3	12.0	12.3	11.8	11.7	12.1
Northampton (Crude	12.0	11.3	11.6	11.5	11.3	11.6	11.3	11.4	10.9	12.6
Adjusted*					11.8	11.1	10.8	10.9	10.4	12.1

*See explanation on page 11.

TABLE 4. NORTHAMPTON, 1936. METEOROLOGICAL DATA.

MONTH.	RAINFALL.			TEMPERATURE.					DIRECTION OF WIND.					BRIGHT SUNSHINE.		
	Total inches.	Greatest in 24 hours.		Days on which 0.01 in. or more fell.	Mean.	Maximum.		Minimum.		No. of Nights at or below 32 deg. F.	SW. Quadrant including W. Days.	SE. Quadrant including S. Days.	NE. Quadrant including E. Days.	NW. Quadrant including N. Days.	Hrs.	Mins.
		Depth.	Date.			Deg.	Date.	Deg.	Date.							
January ..	4.42	0.80	31	21	39.59	54.0	9	22.0	19	13	14	12	2	3	44	10
February	1.98	0.62	22	17	37.02	51.5	18	23.5	12	15	6	10	9	4	79	20
March	1.55	0.29	26	18	45.94	63.0	21	32.0	4	2	5	10	11	5	55	5
April	1.88	0.45	1	14	45.25	65.0	28	32.0	14	4	4	3	10	13	97	5
May	1.14	0.55	6	10	54.47	78.2	18	36.5	31	0	2	2	17	10	126	45
June	3.11	0.47	12	19	60.47	85.0	(20 21	39.0	2	0	14	5	7	4	134	55
July	4.99	1.18	9	26	61.48	75.5	5	49.0	(27 30	0	20	5	1	5	115	45
August ..	0.38	0.10	(6 19	8	63.18	81.0	29	48.5	(23 29	0	12	0	7	12	177	10
September	3.09	0.50	20	19	59.12	73.0	2	41.0	29	0	11	5	9	5	87	40
October ..	1.93	0.33	(30 31	17	49.87	63.5	15	33.5	4	0	11	4	6	10	104	45
November	2.94	0.57	16	20	42.73	56.0	17	28.2	25	8	11	5	5	9	48	15
December	3.37	1.18	14	19	41.91	56.0	17	26.0	7	11	19	2	1	9	55	25
Year 1936	30.78	1.18	July 9 Dec. 14	208	50.09	85.0	June 20 & 21	22.0	Jan. 19	53	129*	63	85	89	1126	20

*Includes six "calm" days (two each in January September and November)

TABLE 5. NORTHAMPTON, 1936.

SUMMARY OF ROUTINE WORK OF THE SANITARY INSPECTORS.

	Number of Inspections, etc.	No. at which Nuisances, Defects, etc., were Found.
1.—Total Number of Inspections and Visits	23238	
2.—Number of Premises at which Nuisances were Found		1822
3.—Total Number of Houses Inspected	2141	1320
4.—Number of these Houses Repaired		1016
5.—Number of these Houses Cleansed and Whitewashed		966
6.—Number of Houses Cleansed after Certificate of M.O.H. (Sec. 46, P.H.A. 1875)		0
7.—Number of First Visits made in consequence of Complaints by Residents	535	377
8.—Notices Served	1024	
9.—Drains :—		
Tested by Smoke Test	44	31
Tested by Volatile Test	49	21
Tested by Water Test	5	0
Exposed under Sec. 41, P.H.A. 1875	7	7
Drains reported choked		104
Drains reconstructed		32
Drains repaired		47
Bath, lavatory, or sink waste pipes dis- connected from drains		2
New pans fixed to closets		55
Indoor soil pipes abolished		1
Closets supplied with flushing apparatus		1
10.—Contraventions of Bye-laws :—		
Animals kept so as to be a nuisance		1
Animals kept in contravention of Bye-laws ..		0
Accumulations of manure, etc., at :—		
(a) Houses		4
(b) Other premises		7
Other contraventions		0
11.—Other Nuisances :—		
Overcrowding in houses		207
Yard pavings re-laid or repaired		280
Spoutings repaired or renewed		185
New slop sinks fixed		74
Houses supplied with town water		0
Chimney observations	43	3
Miscellaneous nuisances		613

Continued on next page.

TABLE 5.—*continued.*

	Number of Inspections, etc.	No. at which Nuisances, Defects, etc., were Found.
12.—Factories and Workshops—Inspections of:—		
Factories	137	20
Workshops	143	9
Workplaces	178	27
Outworkers' Premises	132	1
13.—Dairies, Cowsheds, and Milkshops:—		
Number of Inspections	615	9
Number of New Registrations	13	
14.—Bakehouses—Number of Inspections	306	41
15.—Slaughterhouses:—		
Number of Inspections while Slaughtering was in Progress	4380	18
Number of Other Inspections	287	6
16.—Other Premises where Food is Manufactured, Stored, or Exposed for Sale—Number of Inspections	1328	13
17.—Food and Drugs (Adulteration) Act—Number of Samples sent to Public Analyst	319	13
18.—Infectious Diseases—Visits to Infected Houses:—		
(a) First visits for investigation	296	
(b) Weekly visits to secure isolation	104	
(c) Visits to control disinfection	218	
19.—Number of Visits for Inspection of:—		
(a) Schools	21	1
(b) Public Lavatories	158	1
(c) Van-dwellers	28	3
(d) Cinemas, etc.	21	1
(e) Restaurant Kitchens, Teashops, etc.	21	0
(f) Shops	198	164
(g) Offensive Trades	38	1
20.—Houses Inspected under Housing Consolidated Regulations, 1925 and 1932:—		
Number of Houses Inspected	1431	1064
Defective Houses Repaired		917
Houses Cleansed and Whitewashed		797
21.—Houses Unfit for Human Habitation reported to M.O.H. under Housing Act, 1930:—		
(a) Section 1	185	185
(b) Section 17	0	0
(c) Section 19	12	12
(d) Section 20	0	0

TABLE 6. NORTHAMPTON, 1936.
RECONSTRUCTION OF DRAINS.

SITUATION OF PREMISES.	NO. OF HOUSES.
Bearward Street, " Bearward Arms "	1
Cranstoun Street, 24, 26, 28	3
Craven Street, 28, 30	2
Drapery, 19, 23	2
East Street, 6, 8, 10	3
Exeter Road, 22, 24	2
Hood Street, 92, 94, 96, 98	4
Kettering Road, 61, 63, 65, 67, 74	5
Mayorhold, " Jolly Smoker's Inn "	1
Military Road, 46, 48, 50, 52	4
Pike Lane, 8, 9, 10	3
Wellingborough Road, 40, 44	2
Total	32

TABLE 7. NORTHAMPTON, 1936.

DRAIN EXAMINATION UNDER SECTION 41 OF THE PUBLIC HEALTH ACT, 1875.

SITUATION OF PREMISES	RESULT OF EXAMINATION.	REMARKS.
Arundel Street, 63	Defective	Repaired.
Cooper Street, 20	Defective	Repaired.
Dunster Street, 49	Defective	Repaired.
Hood Street, 92, 94, 96, 98	Defective	Reconstructed.
Number of Drains Examined		7

TABLE 8. NORTHAMPTON, 1936.

HOUSING ACT, 1930. HOUSES REPRESENTED DURING THE YEAR.
SUBSEQUENT ACTION AND CONDITION AT THE END OF THE YEAR.

HOUSES.	DATE OF		REMARKS.
	Representations.	Demolition Orders.	
Coal Pits Cottages, 1, 2, and 3	12-2-36	—	Converted into stores for use of small holdings tenants.
Manor Road, 21	8-1-36	4-5-36	Demolished by Corporation in default of owner.
Nelson Street, 25	8-1-36	4-5-36	Demolished.
Pike Lane, 12	16-9-36	—	Occupied. (Demolition Order made on 4-1-37).
St. George's Square, 24	8-1-36	4-5-36	Demolished.
St. Leonard's Road, Bungalows 1 and 2	11-3-36	—	Both vacant. Undertaking ac- cepted from owner; premises not to be used again for human habitation.
Welford Road, 31, 33, and 35	12-2-36	6-7-36	All demolished.

TABLE 9. NORTHAMPTON, 1936.

HOUSING ACT, 1930. HOUSES REPRESENTED PREVIOUS TO 1936, BUT NOT FINALLY DEALT WITH BEFORE THIS YEAR BEGAN. ACTION TAKEN DURING 1936, AND CONDITION AT THE END OF THE YEAR.

HOUSES.	DATE OF		REMARKS.
	Representations.	Demolition Orders.	
Bath Street, 57 and 59	20-11-35	2-3-36	Both demolished.
Bearward Street, 24 and 26	20-11-35	2-3-36	Both demolished.
Grafton Street, 68, 70, and 72	20-11-35	2-3-36	All demolished.
Green Street, 114 and 116	16-10-35	2-3-36	Both demolished.
Harborough Road, 74	12-12-34	—	Demolished.
Harborough Road, 76, 78, and 80	12-12-34	1-4-35	All demolished.
Harding Terrace, 40 42, and 44	11-12-35	4-5-36	All demolished.
Vicarage Lane, 20	12-6-35	7-10-35	Demolished by Corporation in default of owner.
Wellington Street, Court 1 ; 1	15-3-33	—	Occupied. Action deferred.

TABLE 10. NORTHAMPTON, 1936.

UN SOUND FOOD VOLUNTARILY SURRENDERED AND DESTROYED.

NATURE OF FOOD.	WEIGHT.			
	TONS.	CWT.	QR.	LB.
Beef, home killed	12	16	1	4
Beef, imported	—	1	1	25
Mutton, home killed	—	17	0	14
Offal	1	15	1	7
Pork, home killed	5	11	1	4
Veal, home killed	—	5	1	24
Bacon	—	2	0	4
Fish	1	7	0	13
Fruit	—	1	0	18
Ham	—	2	0	18
Sausages	—	—	1	25
Total	22	19	3	16

Also 5,838 tins of food and 181 rabbits.

There were 703 surrenders, but no seizures.

TABLE 11. NORTHAMPTON, 1936.

UN SOUND FOOD. STATEMENT OF CARCASSES OF MEAT CONDEMNED,
SHEWING NUMBER AFFECTED WITH TUBERCULOSIS.

NATURE OF FOOD.	MEAT CONDEMNED.		MEAT FOUND TO BE TUBERCULOUS.	
	WHOLE CARCASSES.	PART CARCASSES.	WHOLE CARCASSES.	PART CARCASSES
Beef	34	37	26	29
Mutton	43	3	0	0
Pork	50	263	24	261
Veal	4	1	1	0

TABLE 12. NORTHAMPTON, 1936.
FOOD AND DRUGS. SAMPLES TAKEN FOR ANALYSIS.

NATURE OF SAMPLE.	INFORMAL SAMPLES.		OFFICIAL SAMPLES.	
	TOTAL NUMBER.	NO. NOT GENUINE.	TOTAL NUMBER.	NO. NOT GENUINE.
Ammoniated Quinine Tablets	1	—	—	—
Arrowroot	2	—	—	—
Boracic Ointment	1	—	—	—
Borax	2	—	—	—
Butter	3	—	10	—
Camphorated Oil	2	—	2	—
Cheese	2	—	4	—
Cocoa	2	—	—	—
Coffee	4	—	—	—
Cream (tinned)	2	—	—	—
Cream of Tartar	2	—	—	—
Custard Powder	3	—	—	—
Dripping	—	—	4	—
Fish Cake	1	—	—	—
Flour	1	—	—	—
Flour (self-raising)	1	—	—	—
Fruit Salad (dried)	2	—	—	—
Glycerine	3	—	—	—
Ground Almonds	2	—	—	—
Ground Ginger	2	—	—	—
Honey	1	—	—	—
Iodine Paint	1	—	—	—
Jam	3	—	4	—
Lard	—	—	6	—
Lemon Curd	1	—	—	—
Liquid Paraffin	1	—	—	—
Liquorice Powder	5	—	—	—
Margarine	—	—	2	—
Milk	32	4	160	8
Milk (condensed)	1	—	—	—
Milk (skim)	—	—	1	—
Olive Oil	2	—	—	—
Orange Quinine Wine ..	2	—	—	—
Paste (fish)	6	—	—	—
Paste (meat)	1	—	—	—
Pepper	2	—	—	—
Rice	8	—	—	—
Sausages	6	—	2	—
Sugar	2	—	—	—
Sulphur Ointment	1	—	—	—
Sweet Spirit of Nitre ..	—	—	2	—
Tea	4	—	—	—
Vinegar	—	—	2	1
Zinc Ointment	3	—	—	—
Totals	120*	4	199*	9

*A total of 319 samples, 13 of which (4·1 per cent.) were found not to be genuine.

TABLE 13. NORTHAMPTON, 1876-1936.

SCARLET FEVER INCIDENCE AND MORTALITY, WITH RATES FOR ENGLAND
AND WALES FOR COMPARISON.

Years.	Notifica- tions.	Attack- rates per 1,000.	Deaths.	Death- rates.	Numbers removed to Hospitals.	Removal rates per cent.	E. & W. Attack- rates.	E. & W. Death- rates.
1876			77	1.65				0.69
1877			13	0.27				0.59
1878			14	0.29				0.75
1879			0	0.00				0.69
1880			3	0.06				0.68
1881			36	0.69				0.55
1882			11	0.21				0.52
1883			23	0.43				0.48
1884			11	0.20				0.40
1885			6	0.11				0.23
1886			24	0.42				0.22
1887			38	0.67				0.28
1888			22	0.38				0.23
1889	58	0.98	19	0.32	12	20.7		0.24
1890	105	1.74	4	0.07	34	32.4		0.24
1891	43	0.70	1	0.02	19	44.2		0.17
1892	375	6.14	2	0.03	126	33.6		0.19
1893	209	3.42	6	0.10	66	31.6		0.24
1894	429	7.03	5	0.08	200	46.6		0.17
1895	269	4.40	9	0.15	139	51.7		0.15
1896	384	6.29	11	0.18	264	68.7		0.18
1897	866	14.17	41	0.67	432	49.9		0.15
1898	731	11.96	15	0.25	317	43.4		0.11
1899	338	5.53	11	0.18	232	68.6		0.12
1900	93	1.43	3	0.05	67	72.0		0.12
1901	171	1.96	3	0.03	108	63.2		0.13
1902	161	1.84	3	0.03	118	73.3		0.15
1903	662	7.55	24	0.27	398	60.1		0.13
1904	2224	25.27	40	0.45	746	33.5		0.11
1905	827	9.37	16	0.18	493	59.6		0.11
1906	276	3.11	5	0.06	208	75.4		0.10
1907	307	3.45	5	0.06	222	72.3		0.09
1908	731	8.19	5	0.06	451	61.7		0.08
1909	951	10.62	4	0.04	612	64.4		0.09
1910	279	3.11	0	0.00	208	74.6		0.07
1911	136	1.51	0	0.00	108	79.4	2.90	0.05
1912	279	3.08	1	0.01	229	82.1	2.98	0.05
1913	435	4.79	6	0.07	282	64.8	3.58	0.06
1914	365	4.01	2	0.02	226	61.9	4.47	0.08
1915	681	7.54	8	0.09	335	49.2	3.59	0.06

Continued on next page.

TABLE 13.—*continued.*

Years.	Notifica- tions.	Attack- rates per 1,000.	Deaths.	Death- rates.	Numbers removed to Hospitals.	Removal rates per cent.	E. & W. Attack- rates.	E. & W. Death- rates.
1916	262	3.04	2	0.02	187	71.4	2.19	0.04
1917	59	0.72	0	0.00	37	62.7	1.45	0.02
1918	37	0.46	1	0.01	26	70.3	1.44	0.03
1919	71	0.80	0	0.00	44	62.0	2.29	0.03
1920	62	0.67	0	0.00	49	79.0	3.19	0.04
1921	118	1.28	1	0.01	89	75.4	3.64	0.03
1922	297	3.20	2	0.02	175	58.9	2.85	0.04
1923	409	4.39	6	0.06	247	60.4	2.24	0.03
1924	1056	11.28	6	0.06	530	50.2	2.16	0.02
1925	228	2.43	4	0.04	148	64.9	2.36	0.03
1926	194	2.07	0	0.00	97	50.0	2.10	0.02
1927	172	1.84	0	0.00	90	52.3	2.16	0.01
1928	228	2.42	0	0.00	129	56.6	2.61	0.01
1929	279	2.97	0	0.00	186	66.7	3.05	0.02
1930	219	2.35	0	0.00	141	64.4	2.76	0.02
1931	165	1.78	0	0.00	99	60.0	2.05	0.01
1932	124	1.30	0	0.00	90	72.6	2.12	0.01
1933	163	1.69	0	0.00	110	67.5	3.21	0.02
1934	240	2.49	0	0.00	181	75.4	3.76	0.02
1935	415	4.29	2	0.02	332	80.0	2.96	0.01
1936	188	1.95	0	0.00	142	75.5	2.53	0.01
1876-1880			107	0.45				0.68
1881-1885			87	0.33				0.44
1886-1890			107	0.37				0.24
1891-1895	1325	4.34	23	0.08	550	41.5		0.18
1896-1900	2412	7.80	81	0.26	1312	54.4		0.14
1901-1905	4045	9.22	86	0.20	1863	46.1		0.13
1906-1910	2544	5.70	19	0.04	1701	66.9		0.09
1911-1915	1896	4.19	17	0.04	1180	62.2	3.50	0.06
1916-1920	491	1.14	3	0.01	343	69.9	2.11	0.03
1921-1925	2108	4.53	19	0.04	1189	56.4	2.65	0.03
1926-1930	1092	2.33	0	0.00	643	58.9	2.54	0.02
1931-1935	1107	2.31	2	0.00	812	73.4	2.82	0.01

TABLE 14. NORTHAMPTON, 1936.
ENTERICA, SCARLET FEVER, AND DIPHTHERIA.

Diseases.	Notifica- tions.	Attack- rates per 1,000.	Deaths.	Death- rates.	Fatality.	Numbers removed to Hospital.	Removal rates per cent.
Enterica	6	0·06	0	0·00	0·0	4*	66·7
Scarlet Fever	188	1·95	0	0·00	0·0	142†	75·5
Diphtheria	28	0·29	1	0·01	3·6	28‡	100·0

*Three admitted to Northampton General Hospital and one to the Infectious Diseases Hospital, Harborough Road.

†One to General Hospital, remainder to Harborough Road Hospital.

‡All to Harborough Road Hospital (including one first admitted to General Hospital for possible tracheotomy).

TABLE 15. NORTHAMPTON, 1936.
BOROUGH INFECTIOUS DISEASES HOSPITAL, HARBOROUGH ROAD.
CASES UNDER TREATMENT.

	Scarlet Fever.	Diph- theria.	Enter- ica.	Pneu- monia.	Others.	Totals.
Remaining at end of 1935 ..	23	6	—	—	—	29
Admitted during 1936	141	30	2	1	6*	180
Discharged during 1936	156	33	1	1	6	197
Died during 1936	—	1	1	—	—	2
Remaining at end of 1936 ..	8	2	—	—	—	10

*Comprises three cases of measles, one erysipelas, one pemphigus, and one whooping cough.

TABLE 16. NORTHAMPTON, 1936.
NUMBER OF ARTICLES DISINFECTED BY STEAM MONTH BY MONTH AT
THE DISINFECTING STATION, ST. ANDREW'S ROAD.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
533	466	722	500	579	464	464	309	219	261	264	243	5024

TABLE 17. NORTHAMPTON, 1881-1936.
CANCER DEATH-RATES.

YEARS.	RATES.	YEARS.	RATES.
1881	0.59	1921	1.13
1882	0.41	1922	1.24
1883	0.33	1923	1.46
1884	0.73	1924	1.39
1885	0.41	1925	1.49
1886	0.32	1926	1.27
1887	0.45	1927	1.42
1888	0.74	1928	1.59
1889	0.49	1929	1.57
1890	0.46	1930	1.79
1891	0.59	1931	1.60
1892	0.49	1932	1.42
1893	0.72	1933	1.81
1894	0.77	1934	1.85
1895	0.57	1935	1.66
1896	0.83	1936	1.74
1897	0.65		
1898	0.52		
1899	0.85	1881—1885	0.50
1900	0.72	1886—1890	0.49
1901	0.60	1891—1895	0.63
1902	0.87	1896—1900	0.72
1903	0.98		
1904	0.76	1901—1905	0.83
1905	0.94	1906—1910	0.98
1906	0.90	1911—1915	1.13
1907	0.81	1916—1920	1.19
1908	1.04		
1909	1.09	1921—1925	1.34
1910	1.05	1926—1930	1.53
1911	0.99	1931—1935	1.67
1912	1.07		
1913	1.04		
1914	1.30	1881—1890	0.49
1915	1.27	1891—1900	0.67
1916	1.28	1901—1910	0.91
1917	1.16	1911—1920	1.16
1918	1.15	1921—1930	1.44
1919	1.24		
1920	1.10		

TABLE 18. NORTHAMPTON, 1911—1936.

CANCER DEATHS. AGE AND SEX INCIDENCE.

Years.	Total Deaths.	Males—Ages at Death.						Females—Ages at Death.							
		Under 45	45—55	55—65	65—75	75—85	85 & over.	Total (males).	Under 45	45—55	55—65	65—75	75—85	85 & over.	Total (females).
1911	89	4	7	8	10	6	—	35	9	13	17	13	2	—	54
1912	97	2	8	12	11	5	—	38	6	21	11	14	7	—	59
1913	94	2	13	12	16	5	—	48	3	15	7	15	4	2	46
1914	118	3	5	14	21	3	—	46	9	14	23	13	11	2	72
1915	115	5	10	13	14	2	—	44	7	11	22	19	10	2	71
1916	110	11	19	41	38	13	—	122	21	36	51	43	26	—	177
1917	96														
1918	93														
1919	110	4	7	19	15	5	1	51	3	13	17	14	12	—	59
1920	102	4	5	17	13	6	—	45	2	12	14	22	6	1	57
1921	104	6	6	17	17	1	—	47	7	11	13	15	11	—	57
1922	115	5	13	21	14	4	—	57	8	12	15	11	12	—	58
1923	136	2	10	24	17	6	—	59	9	17	16	25	9	1	77
1924	130	3	9	11	20	7	1	51	13	15	19	22	8	2	79
1925	140	2	17	20	19	8	2	68	8	13	15	22	13	1	72
1926	119	3	4	14	20	7	—	48	4	16	24	19	6	2	71
1927	132	7	10	21	24	8	—	70	9	10	10	25	6	2	62
1928	150	2	6	22	23	14	—	67	4	19	15	33	10	2	83
1929	148	2	11	15	19	14	2	63	9	11	25	22	14	4	85
1930	167	7	8	33	32	4	—	84	6	20	17	32	7	1	83
1931	148	3	12	20	22	9	—	66	7	18	23	15	15	4	82
1932	136	3	6	13	26	8	1	57	2	15	23	27	10	2	79
1933	175	8	8	22	25	15	—	78	7	12	14	42	19	3	97
1934	179	5	7	22	32	19	3	88	4	14	21	27	17	8	91
1935	161	2	5	14	32	17	3	73	3	16	23	28	15	3	88
1936	168	5	8	20	31	20	2	86	10	13	19	19	18	3	82

TABLE 19. NORTHAMPTON, 1931—1936.
CANCER DEATHS. ANALYSIS ACCORDING TO THE PART OF THE BODY PRINCIPALLY AFFECTED.

Years.	Total Deaths.	Males.							Females.								
		A	B	C	G	H	I	Total.	A	B	C	D	E	F	H	I	Total.
1931	148	5	39	5	11	1	5	66	—	49	3	11	2	14	—	3	82
1932	136	1	35	7	11	—	3	57	1	34	4	13	4	19	1	3	79
1933	175	8	45	11	10	2	2	78	—	48	1	16	7	18	—	7	97
1934	179	9	48	9	14	1	7	88	2	48	4	11	1	19	1	5	91
1935	161	7	48	7	8	—	3	73	2	45	1	12	5	18	1	4	88
1936	168	6	55	8	15	—	2	86	4	44	1	15	3	10	—	5	82

A	—	Cancer of Buccal Cavity and Pharynx ;	F	—	Breast ;
B	—	Digestive Organs and Peritoneum ;	G	—	Male Genito-urinary Organs ;
C	—	Respiratory Organs ;	H	—	Skin ;
D	—	Uterus ;	I	—	Other or Unspecified Organs.
E	—	Other Female Genital Organs ;			

TABLE 20. NORTHAMPTON, 1936.

CLINICAL BACTERIOLOGY. NUMBER OF SUSPECTED CASES IN WHICH EXAMINATION WAS MADE AND THE NUMBER AND NATURE OF THE REPORTS RECEIVED IN CONNECTION WITH THESE.

DIPHTHERIA— Throat and Nose Secretions.	TYPHOID AND PARATYPHOID FEVERS— Dreyer's Tests, etc.			TUBERCULOSIS— Sputum, Urine, etc.			OTHER CONDITIONS.			TOTALS.								
	No. of Suspected Cases.	Reports received.			No. of Suspected Cases.	Reports received.			No. of Suspected Cases.	Reports received.								
		Positive.	Negative.	Total.		Positive.	Negative.	Total.		Positive.	Negative.	Total.						
289	55	416	471	13	4	15	19	467	170	442	612	1	0	1	770	230	873	1103

The above Table does not take into account the reports made in connection with the venereal diseases scheme.

TABLE A.
COUNTY BOROUGH OF NORTHAMPTON.
Vital Statistics during 1936 and Previous Years.

Year.	Total Population estimated to Middle of each Year.	Births.			Total Deaths registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.		Number.	Rate.	Non-residents registered in the District.	Residents not registered in the District.	Under One Year.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Live Births.	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	88610	1985	1985	22·4	1108	12·5	77	22	240	120·9	1061	12·0
1907	88915	1956	1956	22·0	1209	13·6	98	37	235	120·1	1151	12·9
1908	89223	2043	2043	22·9	1192	13·4	93	32	198	96·9	1131	12·7
1909	89534	1957	1957	21·9	1332	14·9	84	46	215	109·9	1294	14·5
1910	89843	1900	1900	21·1	1177	13·1	84	36	209	110·0	1129	12·6
1911	90152	1930	1931	21·4	1240	13·8	86	46	250	129·5	1200	13·3
1912	90467	1932	1935	21·4	1172	13·0	120	45	140	72·4	1097	12·1
1913	90793	1868	1868	20·6	1233	13·6	114	61	175	93·7	1180	13·0
1914	91123	1854	1857	20·4	1331	14·6	133	55	164	88·3	1253	13·8
1915	91123	1748	1754	19·2	1562	17·3	109	83	236	134·5	1536	17·0
1916	93709	1883	1893	20·2	1206	14·0	116	58	127	67·1	1148	13·3
1917	91932	1466	1471	16·0	1217	14·8	128	86	128	87·0	1175	14·2
1918	90884	1316	1313	14·4	1426	17·6	122	81	121	92·2	1385	17·1
1919	92653	1432	1411	15·2	1301	14·6	137	54	116	82·2	1218	13·7
1920	92950	2318	2248	24·2	1137	12·3	130	40	166	73·8	1047	11·3
1921	92300	1924	1881	20·4	1022	11·1	123	65	124	65·9	964	10·4
1922	92950	1697	1646	17·7	1108	11·9	116	54	86	52·2	1046	11·3
1923	93230	1723	1662	17·8	1177	12·6	140	49	95	57·2	1086	11·6
1924	93800	1591	1534	16·4	1143	12·2	149	42	80	52·1	1036	11·1
1925	93970	1531	1471	15·6	1229	13·1	167	54	98	66·6	1116	11·9
1926	93740	1393	1309	14·0	1163	12·4	174	75	72	55·0	1064	11·4
1927	93260	1362	1281	13·7	1248	13·4	170	46	78	60·9	1124	12·0
1928	94270	1366	1308	13·9	1204	12·8	207	63	70	53·5	1060	11·3
1929	94180	1332	1249	13·3	1269	13·5	226	50	66	52·8	1093	11·6
1930	93460	1334	1224	13·1	1217	13·0	193	48	69	56·4	1072	11·5
1931	92970	1307	1233	13·3	1243	13·4	205	53	87	70·6	1091	11·8
1932	96730	1326	1244	13·0	1265	13·2	207	50	80	64·3	1108	11·6
1933	96630	1236	1152	11·9	1277	13·2	236	50	52	45·1	1091	11·3
1934	96550	1298	1180	12·2	1344	13·9	289	41	54	45·8	1096	11·4
1935	96700	1301	1155	11·9	1311	13·6	298	38	58	50·2	1051	10·9
1936	96300	1419	1204	12·5	1448	15·0	298	59	48	39·9	1209	12·6

This Table is arranged to shew the gross births and deaths in the district and the births and deaths properly belonging to it, with the corresponding rates.

From 1915 to 1931 the death-rates are calculated on the estimated civil populations supplied by the Registrar-General for that purpose.

The birth-rate and death-rate for 1932 are calculated on a mean population of 95,670 owing to the Borough extension on 1st April, 1932.

TABLE B.
COUNTY BOROUGH OF NORTHAMPTON.
Cases of Notifiable Diseases during the Year 1936.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.													CASES NOTIFIED IN EACH WARD.											Cases Admitted to Borough Hospitals	Total Deaths (see Table C)	
	ALL AGES.	AGES (IN YEARS).												Castle.	Delapre.	Kingsley.	Kingsthorpe.	St. Crispin's.	St. Edmund's.	St. George's.	St. James'.	St. Michael's.	South.	Spencer.			Weston.
		0-	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-	65-														
Diphtheria	28	—	—	1	—	1	14	4	4	4	—	—	—	3	1	—	1	2	—	1	6	1	13	—	—	28	1
Enterica	6	—	—	—	—	—	—	—	—	4	—	2	—	1	2	1	—	—	—	—	—	2	—	—	1	—	
Erysipelas	48	—	1	—	—	—	1	—	2	9	9	14	12	3	5	3	5	6	2	1	4	4	11	2	2	4*	3
Ophthalmia Neonatorum	7	7	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	2	1	—	1	—	—	—	—
Pneumonia	148	9	15	9	4	4	18	4	5	20	10	33	17	14	16	8	9	14	8	8	22	13	9	14	13	10†	57‡
Puerperal Fever	5	—	—	—	—	—	—	—	—	5	—	—	—	—	—	1	—	—	—	1	—	—	2	—	1	—	3||
Puerperal Pyrexia	23	—	—	—	—	—	—	—	—	16	7	—	—	1	1	2	3	3	—	1	—	—	11	—	1	—	—
Scarlet Fever	188	—	3	10	6	18	81	40	11	14	4	1	—	7	21	18	28	19	12	16	14	18	11	18	6	141	—
Tuberculosis :— Respiratory	86	—	—	—	—	—	—	1	7	44	22	11	1	9	6	7	10	12	4	4	3	11	6	3	11	57§	54
Other Forms	11	—	—	—	1	—	1	2	2	3	2	—	—	1	—	1	2	2	—	—	1	1	2	1	—	3¶	8
Totals	550	16	19	20	11	23	115	51	31	119	54	61	30	39	53	42	58	59	26	34	51	48	68	38	34	244	126

*One to Harborough Road Hospital and three to St. Edmund's Hospital.

†One to Harborough Road Hospital and nine to St. Edmund's Hospital.

‡Five of these were from influenzal pneumonia.

||Two of these deaths related to cases originally notified as puerperal pyrexia and one was not notified.

§Forty-one to Welford Road Hospital and sixteen to Creaton Sanatorium.

¶Three to Manfield Orthopædic Hospital.

The above figures take no account of corrections in diagnosis. (See Section VI. of this Report for further information).

INSTITUTIONS :—(1) Harborough Road Infectious Diseases Hospital (85 beds, allowing 144 sq. ft. per bed) ;
(2) Smallpox Hospital, near Hardingstone (48 beds, allowing 144 sq. ft. per bed) ;
(3) Welford Road Tuberculosis Hospital (32 beds) ;
(4) St. Edmund's Hospital (Public Assistance Institution) (191 beds) ;
(5) Creaton Sanatorium, Northampton (15 beds reserved for Northampton County Borough) ;
(6) Manfield Orthopædic Hospital, Northampton (20 beds available for surgical tuberculosis cases).

TABLE C.

COUNTY BOROUGH OF NORTHAMPTON.

Causes of Death at Different Periods of Life during the Year 1936.

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES (IN YEARS) OF " RESIDENTS "														Total Deaths whether of Residents or Non-Residents in Institutions in the District.
		ALL AGES.			0-	1-	2-	5-	15-	25-	35-	45-	55-	65-	75-	
		Total.	M.	F.												
ALL CAUSES	{ Certified Uncertified	1206 3	587 3	619 —	48 —	9 —	8 —	11 —	41 —	43 —	58 —	99 —	183 1	301 —	405 2	671 —
1.	Typhoid and Paratyphoid Fevers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	Measles	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—
3.	Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
4.	Whooping Cough	2	—	2	—	1	1	—	—	—	—	—	—	—	—	1
5.	Diphtheria	1	1	—	—	—	—	1	—	—	—	—	—	—	—	2
*6.	Influenza	19	12	7	—	—	—	—	—	1	—	5	2	4	7	4
7.	Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	Cerebro-spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
9.	Tuberculosis of Respiratory System	54	33	21	—	—	—	—	12	12	9	10	9	2	—	5
*10.	Other Tuberculous Diseases	8	5	3	—	—	—	—	4	2	—	1	1	—	—	15
11.	Syphilis	2	1	1	1	—	—	—	—	—	—	—	—	1	—	6
12.	General Paralysis of the Insane, Tabes Dorsalis	4	3	1	—	—	—	—	—	—	—	2	2	—	—	4
13.	Cancer, Malignant Disease	168	86	82	—	—	—	—	1	3	11	21	39	50	43	89
14.	Diabetes	14	8	6	—	—	—	—	—	—	—	1	4	5	4	13
15.	Cerebral Hæmorrhage, etc.	69	32	37	—	—	—	—	—	—	1	6	8	32	22	32
16.	Heart Disease	419	178	241	—	—	—	2	5	7	14	14	55	115	207	139
17.	Aneurysm	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—
*18.	Other Circulatory Diseases	56	28	28	—	—	—	—	—	—	—	4	5	20	27	17
19.	Bronchitis	24	12	12	3	—	—	—	—	—	—	1	1	8	11	11
*20.	Pneumonia (all forms)	52	31	21	5	4	1	2	4	1	1	9	10	7	8	23
21.	Other Respiratory Diseases	5	3	2	—	—	—	—	—	—	—	1	—	3	1	2
22.	Peptic Ulcer	11	8	3	—	—	—	—	—	—	2	3	3	3	—	22
23.	Diarrhœa, etc.	9	4	5	1	1	1	1	1	—	—	—	2	1	1	7
24.	Appendicitis	10	6	4	—	—	—	1	1	—	2	—	1	4	1	18
25.	Cirrhosis of Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
26.	Other Diseases of Liver, etc.	4	—	4	—	—	—	—	—	—	—	—	3	—	1	6
27.	Other Digestive Diseases	21	12	9	—	1	—	1	1	—	2	1	5	5	5	33
28.	Acute and Chronic Nephritis	46	21	25	—	—	—	—	2	2	5	4	9	15	9	24
29.	Puerperal Sepsis	3	—	3	—	—	—	—	1	2	—	—	—	—	—	4
30.	Other Puerperal Causes	1	—	1	—	—	—	—	—	—	1	—	—	—	—	3
31.	Congenital Debility, Premature Birth, Malformations, etc.	33	13	20	32	—	1	—	—	—	—	—	—	—	—	23
32.	Senility	49	21	28	—	—	—	—	—	—	—	—	—	5	44	19
33.	Suicide	26	19	7	—	—	—	—	1	3	3	6	9	3	1	3
34.	Other Violence	20	12	8	1	1	2	2	3	2	—	—	3	1	5	50
*35.	Other Defined Causes	75	37	38	4	1	2	1	5	8	7	10	12	16	9	90
36.	Causes Ill-defined or Unknown	2	2	—	—	—	—	—	—	—	—	—	1	—	1	—
Totals		1209	590	619	48	9	8	11	41	43	58	99	184	301	407	671
*Sub- entries included in above figures	6 (a) Influenzal Pneumonia	5	3	2	—	—	—	—	—	—	—	3	—	—	2	1
	10 (a) Tuberculous Meningitis	3	3	—	—	—	—	—	1	2	—	—	—	—	—	6
	18 (a) Arterio-sclerosis	50	26	24	—	—	—	—	—	—	—	2	5	18	25	11
	20 (a) Broncho-pneumonia	24	12	12	5	2	—	1	3	1	—	2	2	2	6	16
	35 (a) Erysipelas	3	1	2	—	—	—	—	—	—	—	—	—	1	2	6
	(b) Rheumatic Fever	6	2	4	—	—	1	1	—	2	1	—	—	1	—	3
	(c) Meningitis	2	1	1	—	—	—	—	—	1	—	—	1	—	—	6

NETT DEATHS REGISTERED.				M.	F.	TOTALS.	DEATH-RATES.
First Quarter	164	182	346	..	14.6		
Second Quarter	149	144	293	..	12.4		
Third Quarter	101	116	217	..	9.2		
Fourth Quarter (14 weeks)	176	177	353	..	13.9		
Totals (53 weeks)	590	619	1209	..	12.6		

TABLE D.

COUNTY BOROUGH OF NORTHAMPTON.

INFANT MORTALITY DURING THE YEAR 1936.

Nett Deaths from stated Causes at various Ages under One Year.

CAUSES OF DEATH.		Under 1 week.	1 week and under 2 weeks.	2 weeks and under 3 weeks.	3 weeks and under 4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
ALL CAUSES	Certified	22	3	5	5	35	7	3	2	1	48
	Uncertified	—	—	—	—	—	—	—	—	—	—
1.	Smallpox	—	—	—	—	—	—	—	—	—	—
2.	Chickenpox	—	—	—	—	—	—	—	—	—	—
3.	Measles	—	—	—	—	—	1	—	—	—	1
4.	Scarlet Fever	—	—	—	—	—	—	—	—	—	—
5.	Whooping Cough	—	—	—	—	—	—	—	—	—	—
6.	Diphtheria	—	—	—	—	—	—	—	—	—	—
7.	Erysipelas	—	—	—	—	—	—	—	—	—	—
8.	Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—
9.	Abdominal Tuberculosis	—	—	—	—	—	—	—	—	—	—
10.	Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—
11.	Meningitis (<i>not Tuberculous</i>)	—	—	—	—	—	—	—	—	—	—
12.	Convulsions	—	—	1	1	2	—	—	—	—	2
13.	Laryngitis	—	—	—	—	—	—	—	—	—	—
14.	Bronchitis	—	—	—	2	2	1	—	—	—	3
15.	Pneumonia (all forms)	—	—	—	—	—	3	1	1	—	5
16.	Diarrhœa	—	—	—	—	—	—	—	—	—	—
17.	Enteritis	—	—	—	—	—	—	—	1	—	1
18.	Gastritis	—	—	—	—	—	—	—	—	—	—
19.	Syphilis	—	—	1	—	1	—	—	—	—	1
20.	Rickets	—	—	—	—	—	—	—	—	—	—
21.	Suffocation, overlaying	—	—	—	—	—	—	1	—	—	1
22.	Injury at Birth	2	1	—	—	3	—	—	—	—	3
23.	Atelectasis	3	—	—	—	3	—	—	—	—	3
24.	Congenital Malformations	3	1	—	—	4	—	1	—	—	5
25.	Premature Birth	13	1	3	2	19	1	—	—	—	20
26.	Atrophy, Debility, and Marasmus ..	1	—	—	—	1	—	—	—	—	1
27.	Other Causes	—	—	—	—	—	1	—	—	1	2
Totals		22	3	5	5	35	7	3	2	1	48

		Live Births Registered.					Nett Deaths Registered.					Infant Death-rates.		
		M.	F.	Total.			M.	F.	Total.			M.	F.	Total.
Legitimate ..	..	572	586	1158	..	..	17	27	44	..	..	29·7	46·1	38·0
Illegitimate ..	..	20	26	46	..	..	1	3	4	..	..	50·0	115·4	87·0
Totals ..	..	592	612	1204	..	..	18	30	48	..	..	30·4	49·0	39·9

REPORT ON THE
Administration of the FACTORY and WORKSHOP ACT, 1901, in connection with
Factories, Workshops, Workplaces, and Homework.

1.—INSPECTION.

Premises (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
FACTORIES (Including Factory Laundries and Bakehouses)	137	20	—
WORKSHOPS (Including Workshop Laundries and Bakehouses)	143	9	—
WORKPLACES (Other than Outworkers' Premises)	178	27	—
OUTWORKERS' PREMISES	132	1	—
Totals	590	57	—

2.—DEFECTS FOUND.

Particulars. (1)	Number of Defects.			Number of Prosecu- tions. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of Cleanliness	7	7	—	—
Want of Ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of Drainage of Floors	—	—	—	—
Other Nuisances	2	2	—	—
Sanitary Accommodation {	insufficient	1	—	—
	unsuitable or defective	6	—	—
	not separate for sexes	—	—	—
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	41	41	—	—
Other Offences	—	—	—	—
(Excluding offences relating to outwork which are included in Part 3 of this Report)				
Totals	57	57	—	—

*Including those specified in Sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—HOMEWORK.

NATURE OF WORK. (1)	OUTWORKERS' LISTS, SECTION 107.							OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.				
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending lists. (8)	Prosecutions.		Instances. (11)	Notices served. (12)	Prose-cutions. (13)	Instances. (14)	Orders made. (S. 110). (15)	Prose-cutions. (Sections 109, 110). (16)
	Sending twice in a year.			Sending once in the year.				Failing to keep or permit inspection of lists. (9)	Failing to send lists. (10)						
	Lists. (2)	Outworkers.		Lists. (5)	Outworkers.										
		Con-tractors. (3)	Work-men. (4)		Con-tractors. (6)	Work-men. (7)									
WEARING APPAREL :— (1) Making, etc.	12	5	60	2	—	194	—	—	—	—	—	—	—	—	

There are no Outworkers in any of the other trades usually shewn in the above Table.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the year. (1)	Number. (2)
Number of Workshops (including Bakehouses)	137
Number of Outworkers' Premises on Register	186
TOTAL Number of Workshops on Register	323

5.—OTHER MATTERS.

5.—OTHER MATTERS.		
	Class. (1)	Number. (2)
MATTERS NOTIFIED TO H.M. INSPECTOR OF FACTORIES :—		
	Failure to affix abstract of Factory and Workshop Act (s. 133)	—
	Action taken in matters referred by H M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5))	Notified by H.M. Inspector
		9
		Reports (of action taken) sent to H.M. Inspector ..
		9
	Other	—
	Underground Bakehouses (s. 101) in use at the end of the year	1

